

Sequence Listing - P3230R1C1.txt
Sequence Listing

<110> Eaton,Dan L.
Filvaroff, Ellen
Gerritsen, Mary E.
Goddard, Audrey
Godowski, Paul J.
Grimaldi, Christopher J.
Gurney, Austin L.
Watanabe, Colin K.
Wood, William I.

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Val Thr Leu His His Ile Asp Pro Ala Leu Pro Tyr Ile Ser Asp
35 40 45

Thr Gly Thr Val Ala Pro Glu Lys Cys Leu Phe Gly Ala Met Leu
50 55 60

Asn Ile Ala Ala Val Leu Cys Ile Ala Thr Ile Tyr Val Arg Tyr
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Sequence Listing - P3230R1C1.txt

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Leu Asn Lys Ala Gly Leu Val Leu Gly Ile Leu Ser Cys Leu Gly
95 100 105

Leu Ser Ile Val Ala Asn Phe Gln Lys Thr Thr Leu Phe Ala Ala
110 115 120

His Val Ser Gly Ala Val Leu Thr Phe Gly Met Gly Ser Leu Tyr
125 130 135

Met Phe Val Gln Thr Ile Leu Ser Tyr Gln Met Gln Pro Lys Ile
140 145 150

His Gly Lys Gln Val Phe Trp Ile Arg Leu Leu Leu Val Ile Trp
155 160 165

Cys Gly Val Ser Ala Leu Ser Met Leu Thr Cys Ser Ser Val Leu
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His Ser Gly Asn Phe Gly Thr Asp Leu Glu Gln Lys Leu His Trp
185 190 195

Asn Pro Glu Asp Lys Gly Tyr Val Leu His Met Ile Thr Thr Ala
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Ala Glu Trp Ser Met Ser Phe Ser Phe Phe Gly Phe Phe Leu Thr
215 220 225

Tyr Ile Arg Asp Phe Gln Lys Ile Ser Leu Arg Val Glu Ala Asn
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65 70 75

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Pro Phe Tyr Ile Gly Tyr Phe Ile Val Ser Asn Ile Arg Leu Leu
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His Lys Gln Arg Leu Leu Phe Ser Cys Leu Leu Trp Leu Thr Phe
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Pro Lys His Gly Ile Leu Ser Ile Glu Gln Leu Ile Ser Arg Val
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Arg Arg Thr Met Phe Gln Lys Gly Glu Val His Asn Lys Pro Ser
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Gly Phe Trp Gly Met Ile Lys Ser Val Thr Thr Ser Ala Ser Gly
230 235 240

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335 340 345

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350 355 360

Ile Thr Leu Thr Lys Phe Phe Tyr Ala Ile Ser Ser Ser Lys Ser
365 370 375

Ser Asn Val Ile Val Leu Leu Leu Ala Gln Ile Met Gly Met Tyr
380 385 390

Phe Val Ser Ser Val Leu Leu Ile Arg Met Ser Met Pro Leu Glu
395 400 405

Tyr Arg Thr Ile Ile Thr Glu Val Leu Gly Glu Leu Gln Phe Asn
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Phe Tyr His Arg Trp Phe Asp Val Ile Phe Leu Val Ser Ala Leu
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Sequence Listing - P3230R1C1.txt

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Sequence Listing - P3230R1C1.txt

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Sequence Listing - P3230R1C1.txt

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35        40        45

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50        55        60

Cys Arg Leu Leu Gly Leu Ser Leu Ala Gly Lys Asp Gln Val Glu
65        70        75

Thr Ala Leu Lys Ala Ser Phe Glu Thr Cys Ser Tyr Gly Trp Val
80        85        90

Gly Asp Gly Phe Val Val Ile Ser Arg Ile Ser Pro Asn Pro Lys
95        100       105

Cys Gly Lys Asn Gly Val Gly Val Leu Ile Trp Lys Val Pro Val
110       115       120

Ser Arg Gln Phe Ala Ala Tyr Cys Tyr Asn Ser Ser Asp Thr Trp
125       130       135

Thr Asn Ser Cys Ile Pro Glu Ile Ile Thr Thr Lys Asp Pro Ile
140       145       150

Phe Asn Thr Gln Thr Ala Thr Gln Thr Thr Glu Phe Ile Val Ser
155       160       165

Asp Ser Thr Tyr Ser Val Ala Ser Pro Tyr Ser Thr Ile Pro Ala
170       175       180

Pro Thr Thr Thr Pro Pro Ala Pro Ala Ser Thr Ser Ile Pro Arg
185       190       195

Arg Lys Lys Leu Ile Cys Val Thr Glu Val Phe Met Glu Thr Ser
200       205       210

Thr Met Ser Thr Glu Thr Glu Pro Phe Val Glu Asn Lys Ala Ala
215       220       225

Phe Lys Asn Glu Ala Ala Gly Phe Gly Gly Val Pro Thr Ala Leu
230       235       240

Leu Val Leu Ala Leu Leu Phe Phe Gly Ala Ala Ala Gly Leu Gly
245       250       255

Phe Cys Tyr Val Lys Arg Tyr Val Lys Ala Phe Pro Phe Thr Asn

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Sequence Listing - P3230R1C1.txt

260	265	270
Lys Asn Gln Gln Lys Glu Met Ile Glu Thr Lys Val Val Lys Glu		
275	280	285
Glu Lys Ala Asn Asp Ser Asn Pro Asn Glu Glu Ser Lys Lys Thr		
290	295	300
Asp Lys Asn Pro Glu Glu Ser Lys Ser Pro Ser Lys Thr Thr Val		
305	310	315
Arg Cys Leu Glu Ala Glu Val		
320		

<210> 7
 <211> 2586
 <212> DNA
 <213> Homo Sapien

<400> 7
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 caccgcgagc ccggcgccct cccggcggga gcgagcagat ccagtcgggc 100
 ccgcagcgca actcgggtcca gtcggggcgg cggtctcggg cgcagagcgg 150
 agatgcagcg gcttggggcc accctgctgt gctgctgct ggcgcgcgcg 200
 gtccccacgg ccccgcgcc cgctccgacg gcgacctcgg ctccagtaa 250
 gccccggccc gctctcagct acccgagga ggaggccacc ctcaatgaga 300
 tgttccgca ggttgaggaa ctgatggagg acacgcagca caaattgcgc 350
 agcgcggtgg aagagatgga ggcagaagaa gctgtgcta aagcatcatc 400
 agaagtgaac ctggcaaac tacctcccag ctatcacaat gagaccaaca 450
 cagacacgaa ggttggaat aatacatcc atgtgcaccg agaaattcac 500
 aagataacca acaaccagac tggacaaatg gtcttttcag agacagtat 550
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 ccagggggcag caatgggacc atctgtgaca accagaggga ctgccagccg 800
 gggctgtgct gtgccttcca gagaggcctg ctgttcctg tgtgcacacc 850
 cctgccctgt gagggcgagc ttgcatga ccccgccagc cggcttctgg 900

Sequence Listing - P3230R1C1.txt

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 tgtgccagtg gccctcctcg ccagcccccac agccacagcc tgggtgatgt 1000
 gtgcaagccg accttcgtgg ggagccgtga ccaagatggg gagatcctgc 1050
 tgccagaga ggtcccgat gagtatgaag ttggcagctt catggaggag 1100
 gtgcccagg agctggagga cctggagagg agcctgactg aagagatggc 1150
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 ctggggagag tcaggcaggg ttaaaactga ggagcagttt gccaccctg 1450
 tccagattat tggctgcttt gccctacca gttggcagac agccgtttgt 1500
 tctacatggc ttgataatt gttgagggg aggagatgga aacaatgtgg 1550
 agtctccctc tgattggttt tggggaaatg tggagaagag tgcctgtcct 1600
 tgcaaacatc aacctggcaa aaatgaaca atgaatttt ccacgcagtt 1650
 ctttccatgg gcataggtaa gctgtgcctt cagctgttgc agatgaaatg 1700
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 gatctcagag gctcagagac tgcaagctgc ttgcccaagt cacacagcta 1900
 gtgaagacca gagcagtttc atctggttgt gactctaagc tcagtgtcct 1950
 ctccactacc ccacaccagc ctgtgtgcca ccaaagtgc tccccaaaag 2000
 gaaggagaat gggatttttc ttgaggcatg cacatctgga attaaggta 2050
 aactaattct cacatccctc taaaagtaaa ctactgttag gaacagcagt 2100
 gttctcacag tgtggggcag ccgtcttctt aatgaagaca atgatattga 2150
 cactgtccct ctttggcagt tgcattagta accttgaaag gtatatgact 2200
 gagcgtagca tacagggtaa cctgcagaaa cagtacttag gtaattgtag 2250

Sequence Listing - P3230R1C1.txt

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 caattatcaa ccacgtggag aaaaacaaac cgagcagggc tgtgtgaac 2350
 atgtgtgtaa tatgcgactg cgaacactga actctacgcc actccacaaa 2400
 tgaatgtttc aggtgtcatg gactgttgcc accatgtatt catccagagt 2450
 tcttaaagtt taaagttgca catgattgta taagcatgct ttctttgagt 2500
 tttaaattat gtataacat aagttgcatt tagaaatcaa gcataaatca 2550
 cttcaactgc aaaaaaaaaa aaaaaaaaaa aaaaaa 2586

<210> 8

<211> 350

<212> PRT

<213> Homo Sapien

<400> 8

Met	Gln	Arg	Leu	Gly	Ala	Thr	Leu	Leu	Cys	Leu	Leu	Leu	Ala	Ala
1		5		10		15								
Ala	Val	Pro	Thr	Ala	Pro	Ala	Pro	Ala	Pro	Thr	Ala	Thr	Ser	Ala
	20			25		30								
Pro	Val	Lys	Pro	Gly	Pro	Ala	Leu	Ser	Tyr	Pro	Gln	Glu	Glu	Ala
	35			40		45								
Thr	Leu	Asn	Glu	Met	Phe	Arg	Glu	Val	Glu	Glu	Leu	Met	Glu	Asp
	50			55		60								
Thr	Gln	His	Lys	Leu	Arg	Ser	Ala	Val	Glu	Glu	Met	Glu	Ala	Glu
	65			70		75								
Glu	Ala	Ala	Ala	Lys	Ala	Ser	Ser	Glu	Val	Asn	Leu	Ala	Asn	Leu
	80			85		90								
Pro	Pro	Ser	Tyr	His	Asn	Glu	Thr	Asn	Thr	Asp	Thr	Lys	Val	Gly
	95			100		105								
Asn	Asn	Thr	Ile	His	Val	His	Arg	Glu	Ile	His	Lys	Ile	Thr	Asn
	110			115		120								
Asn	Gln	Thr	Gly	Gln	Met	Val	Phe	Ser	Glu	Thr	Val	Ile	Thr	Ser
	125			130		135								
Val	Gly	Asp	Glu	Glu	Gly	Arg	Arg	Ser	His	Glu	Cys	Ile	Ile	Asp
	140			145		150								
Glu	Asp	Cys	Gly	Pro	Ser	Met	Tyr	Cys	Gln	Phe	Ala	Ser	Phe	Gln
	155			160		165								
Tyr	Thr	Cys	Gln	Pro	Cys	Arg	Gly	Gln	Arg	Met	Leu	Cys	Thr	Arg
	170			175		180								

Sequence Listing - P3230R1C1.txt

Asp Ser Glu Cys Cys Gly Asp Gln Leu Cys Val Trp Gly His Cys
185 190 195

Thr Lys Met Ala Thr Arg Gly Ser Asn Gly Thr Ile Cys Asp Asn
200 205 210

Gln Arg Asp Cys Gln Pro Gly Leu Cys Cys Ala Phe Gln Arg Gly
215 220 225

Leu Leu Phe Pro Val Cys Thr Pro Leu Pro Val Glu Gly Glu Leu
230 235 240

Cys His Asp Pro Ala Ser Arg Leu Leu Asp Leu Ile Thr Trp Glu
245 250 255

Leu Glu Pro Asp Gly Ala Leu Asp Arg Cys Pro Cys Ala Ser Gly
260 265 270

Leu Leu Cys Gln Pro His Ser His Ser Leu Val Tyr Val Cys Lys
275 280 285

Pro Thr Phe Val Gly Ser Arg Asp Gln Asp Gly Glu Ile Leu Leu
290 295 300

Pro Arg Glu Val Pro Asp Glu Tyr Glu Val Gly Ser Phe Met Glu
305 310 315

Glu Val Arg Gln Glu Leu Glu Asp Leu Glu Arg Ser Leu Thr Glu
320 325 330

Glu Met Ala Leu Gly Glu Pro Ala Ala Ala Ala Ala Leu Leu
335 340 345

Gly Gly Glu Glu Ile
350

<210> 9

<211> 1395

<212> DNA

<213> Homo Sapien

<400> 9

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tgtcgtctt ccagggtac tcatcacaag gcctaatcca acgttctgc 150

ttcaatctgc aaatctatgg ggtcctggg ctctctgga cccttaactg 200

ggtagggcc ctgggccaat gcgtctcgc tggagccttt gcctcctct 250

actgggcctt ccacaagccc caggacatcc ctactctcc cttaactct 300

Sequence Listing - P3230R1C1.txt

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 cctcatcctg acccttgtgc agatagcccg gggtcatctg gagtatattg 400
 accacaagct cagaggagtg cagaaccctg tagcccgctg catcatgtgc 450
 tgtttcaagt gctgcctctg gtgtctggaa aaatttatca agttctctaa 500
 ccgcaatgca tacatcatga tcgccatcta cgggaagaat ttctgtgtct 550
 cagccaaaaa tgcgttcattg ctactcatgc gaaacattgt caggggtggtc 600
 gtctctggaca aagtcacaga cctgtctgctg ttctttggga agctgtctggt 650
 ggtcggaggc gtgggggttc tgtcttctt tttttctcc ggtcgcacc 700
 cggggctggg taaagacttt aagagccccc acctcaacta ttactggctg 750
 cccatcatga cctccatcct gggggcctat gtcatcgcca gcgggtcttt 800
 cagcgttttc ggcattgtgtg tggacacgct ctctctctgc ttcttggaag 850
 acctggagcg gaacaacggc tccttgacc ggcctacta catgtccaag 900
 agccttctaa agattctggg caagaagaac gaggcgcccc cggacaacaa 950
 gaagaggaag aagtgcacgc tcggccctg atccaggact gcacccacc 1000
 ccaccgtcc agccatccaa ctcacttcg ccttacaggc ctccattttg 1050
 tggtaaaaaa aggttttagg ccaggcgccg tggctcacgc ctgtaacca 1100
 acattttgag aggtgagggc gggcggatca cctgagtcag gagttcgaga 1150
 ccagcctggc caacatgggtg aaacctccgt ctctattaaa aatacaaaaa 1200
 tttagccgaga gtgggtggcat gcacctgtca tccagctac tcgggagggt 1250
 gaggcaggag aatcgcttga acccgggagg cagaggttgc agtgagccga 1300
 gatcgcgcca ctgcactcca acctgggtga cagactctgt ctccaaaaca 1350
 aaacaacaa acaaaaagat ttattaaag atattttgt aactc 1395

<210> 10

<211> 321

<212> PRT

<213> Homo Sapien

<400> 10

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 1 5 10 15

Asn Thr Ser Cys Asn Pro Thr Ala His Leu Val Asn Ser Ser Cys
 20 25 30

Sequence Listing - P3230R1C1.txt

Pro Gly Leu Met Cys Val Phe Gln Gly Tyr Ser Ser Lys Gly Leu
35 40 45

Ile Gln Arg Ser Val Phe Asn Leu Gln Ile Tyr Gly Val Leu Gly
50 55 60

Leu Phe Trp Thr Leu Asn Trp Val Leu Ala Leu Gly Gln Cys Val
65 70 75

Leu Ala Gly Ala Phe Ala Ser Phe Tyr Trp Ala Phe His Lys Pro
80 85 90

Gln Asp Ile Pro Thr Phe Pro Leu Ile Ser Ala Phe Ile Arg Thr
95 100 105

Leu Arg Tyr His Thr Gly Ser Leu Ala Phe Gly Ala Leu Ile Leu
110 115 120

Thr Leu Val Gln Ile Ala Arg Val Ile Leu Glu Tyr Ile Asp His
125 130 135

Lys Leu Arg Gly Val Gln Asn Pro Val Ala Arg Cys Ile Met Cys
140 145 150

Cys Phe Lys Cys Cys Leu Trp Cys Leu Glu Lys Phe Ile Lys Phe
155 160 165

Leu Asn Arg Asn Ala Tyr Ile Met Ile Ala Ile Tyr Gly Lys Asn
170 175 180

Phe Cys Val Ser Ala Lys Asn Ala Phe Met Leu Leu Met Arg Asn
185 190 195

Ile Val Arg Val Val Val Leu Asp Lys Val Thr Asp Leu Leu Leu
200 205 210

Phe Phe Gly Lys Leu Leu Val Val Gly Gly Val Gly Val Leu Ser
215 220 225

Phe Phe Phe Phe Ser Gly Arg Ile Pro Gly Leu Gly Lys Asp Phe
230 235 240

Lys Ser Pro His Leu Asn Tyr Tyr Trp Leu Pro Ile Met Thr Ser
245 250 255

Ile Leu Gly Ala Tyr Val Ile Ala Ser Gly Phe Phe Ser Val Phe
260 265 270

Gly Met Cys Val Asp Thr Leu Phe Leu Cys Phe Leu Glu Asp Leu
275 280 285

Glu Arg Asn Asn Gly Ser Leu Asp Arg Pro Tyr Tyr Met Ser Lys
290 295 300

Ser Leu Leu Lys Ile Leu Gly Lys Lys Asn Glu Ala Pro Pro Asp

Sequence Listing - P3230R1C1.txt

305

310

315

Asn Lys Lys Arg Lys Lys
320

<210> 11

<211> 1901

<212> DNA

<213> Homo Sapien

<400> 11

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ctctgcccc tgcctctgt gcagctgctg ccccgccagc cgcaactcca 150

ccgtgagccg cctcatcttc acgttcttcc tcttctggg ggtgctgggt 200

tccatcatta tgctgagccc gggcgtggag agtcagctct acaagctgcc 250

ctgggtgtgt gaggaggggg ccgggatccc caccgtctg cagggccaca 300

tgcactgtgg ctccctgctt ggctaccgag ctgtctaccg catgtgcttc 350

gccacggcgg ccttcttctt cttcttttc accctgctca tgctctgcgt 400

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gacggctctt tcaccaacat ctggttctac ttccggctgc tgggctcctt 550

cctcttcac ctcaccagc tgggtgctct catcgacttt gcgcactctc 600

ggaaccagcg gtggctgggc aaggccgagg agtgcgattc ccgtgctctg 650

tacgcaggcc tcttctctt cactctctc ttctactgac tgctgatcgc 700

ggcgtggcgg ctgatgttca tgtactacac tgagccacgc ggctgccacg 750

agggcaaggt cttcatcagc ctcaacctca ccttctgtgt ctgcgtgtcc 800

atcgctgctg tcttcccaa ggtccaggac gccagccca actcgggtct 850

gtgcaggcc tcggatcatc cctctacac catgtttgac acctgggtcag 900

ccctatccag tatccctgaa cagaaatgca accccattt gccaacccag 950

ctgggcaacg agacagtgtt ggcaggcccc gagggctatg agaccagtg 1000

gtgggatgcc ccgagcattg tgggcctcat catctctc ctgtgcacc 1050

tcttcacag tctgcgtcc tcagaccacc ggcaggtgaa cagctgatg 1100

cagaccgagg agtgcaccac tatgctagac gccacacagc agcagcagca 1150

Sequence Listing - P3230R1C1.txt

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 cactgcatga tgacgctcac caactggtac aagcccgggtg agaccggaa 1300
 gatgatcagc acgtggaccg ccgtgtgggt gaagatctgt gccagctggg 1350
 cagggtctgt cctctactctg tggaccctgg tagcccccact cctctcgcg 1400
 aaccgcgact tcagctgagg cagcctcaca gcctgccatc tgggtgctcc 1450
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 tggtcacgtc cccagggga cctgcccc ttctggact tcgtgcctta 1850
 ctgagtctct aagacttttt ctaataaaca agccagtgcg tgtaaaaaa 1900
 a 1901

<210> 12

<211> 457

<212> PRT

<213> Homo Sapien

<400> 12

Met Gly Ala Cys Leu Gly Ala Cys Ser Leu Leu Ser Cys Ala Ser
 1 5 10 15

Cys Leu Cys Gly Ser Ala Pro Cys Ile Leu Cys Ser Cys Cys Pro
 20 25 30

Ala Ser Arg Asn Ser Thr Val Ser Arg Leu Ile Phe Thr Phe Phe
 35 40 45

Leu Phe Leu Gly Val Leu Val Ser Ile Ile Met Leu Ser Pro Gly
 50 55 60

Val Glu Ser Gln Leu Tyr Lys Leu Pro Trp Val Cys Glu Glu Gly
 65 70 75

Ala Gly Ile Pro Thr Val Leu Gln Gly His Ile Asp Cys Gly Ser

Sequence Listing - P3230R1C1.txt

80	85	90
Leu Leu Gly Tyr Arg Ala Val Tyr Arg Met Cys Phe Ala Thr Ala		
95	100	105
Ala Phe Phe Phe Phe Phe Phe Thr Leu Leu Met Leu Cys Val Ser		
110	115	120
Ser Ser Arg Asp Pro Arg Ala Ala Ile Gln Asn Gly Phe Trp Phe		
125	130	135
Phe Lys Phe Leu Ile Leu Val Gly Leu Thr Val Gly Ala Phe Tyr		
140	145	150
Ile Pro Asp Gly Ser Phe Thr Asn Ile Trp Phe Tyr Phe Gly Val		
155	160	165
Val Gly Ser Phe Leu Phe Ile Leu Ile Gln Leu Val Leu Leu Ile		
170	175	180
Asp Phe Ala His Ser Trp Asn Gln Arg Trp Leu Gly Lys Ala Glu		
185	190	195
Glu Cys Asp Ser Arg Ala Trp Tyr Ala Gly Leu Phe Phe Phe Thr		
200	205	210
Leu Leu Phe Tyr Leu Leu Ser Ile Ala Ala Val Ala Leu Met Phe		
215	220	225
Met Tyr Tyr Thr Glu Pro Ser Gly Cys His Glu Gly Lys Val Phe		
230	235	240
Ile Ser Leu Asn Leu Thr Phe Cys Val Cys Val Ser Ile Ala Ala		
245	250	255
Val Leu Pro Lys Val Gln Asp Ala Gln Pro Asn Ser Gly Leu Leu		
260	265	270
Gln Ala Ser Val Ile Thr Leu Tyr Thr Met Phe Val Thr Trp Ser		
275	280	285
Ala Leu Ser Ser Ile Pro Glu Gln Lys Cys Asn Pro His Leu Pro		
290	295	300
Thr Gln Leu Gly Asn Glu Thr Val Val Ala Gly Pro Glu Gly Tyr		
305	310	315
Glu Thr Gln Trp Trp Asp Ala Pro Ser Ile Val Gly Leu Ile Ile		
320	325	330
Phe Leu Leu Cys Thr Leu Phe Ile Ser Leu Arg Ser Ser Asp His		
335	340	345
Arg Gln Val Asn Ser Leu Met Gln Thr Glu Glu Cys Pro Pro Met		
350	355	360

Sequence Listing - P3230R1C1.txt

Leu Asp Ala Thr Gln Gln Gln Gln Gln Val Ala Ala Cys Glu
 365 370 375

Gly Arg Ala Phe Asp Asn Glu Gln Asp Gly Val Thr Tyr Ser Tyr
 380 385 390

Ser Phe Phe His Phe Cys Leu Val Leu Ala Ser Leu His Val Met
 395 400 405

Met Thr Leu Thr Asn Trp Tyr Lys Pro Gly Glu Thr Arg Lys Met
 410 415 420

Ile Ser Thr Trp Thr Ala Val Trp Val Lys Ile Cys Ala Ser Trp
 425 430 435

Ala Gly Leu Leu Leu Tyr Leu Trp Thr Leu Val Ala Pro Leu Leu
 440 445 450

Leu Arg Asn Arg Asp Phe Ser
 455

<210> 13

<211> 1572

<212> DNA

<213> Homo Sapien

<400> 13

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ctttagggat ggtgaggttg gaaaagact cctgtaacc tcctccaggga 100

tgaaccacct gccagaagac atggagaacg ctctcaccgg gagccagagc 150

tccatgctt ctctgcgcaa tatcattcc atcaaccca cacaactcat 200

ggccaggatt gagtcctatg aaggaaggga aaagaaaggc atatctgatg 250

tcaggaggac tttctgttg tttgtcacct ttgacctctt attcgtaaca 300

ttactgtgga taatagagtt aaatgtgaat ggaggcattg agaacacatt 350

agagaaggag gtgatgcagt atgactacta ttctcatat tttgatatat 400

ttctctggc agtttttca ttaaagtg taatactgc atatgctgtg 450

tgcagactgc gccattggtg ggcaatagcg ttgacaacgg cagtgaccag 500

tgcttttta ctagcaaaag tgatccttc gaagcttttc tctcaagggg 550

cttttgcta tgtgtgccc atcatttcat tcactcttg ctggattgag 600

acgtgttcc tggatttcaa agtgttacct caagaagcag aagaagaaaa 650

cagactctg atagttcagg atgcttcaga gagggcagca cttatactg 700

Sequence Listing - P3230R1C1.txt

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tctgaagaag ctgaagaaaa acaggacagt gagaaccac ttttagaact 800
atgagtacta cttttgttaa atgtgaaaaa ccttcacaga aagtcacga 850
ggcaaaaaga ggcaggcagt ggagctccc tgtcgacagt aaagttgaaa 900
tggtgacgtc cactgctggc tttattgaac agctaataaa gatttattta 950
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taatcaaaag acttaataata ttgaagtaac acttttttag taagcaagat 1150
acctttttt ttcaattcac agaattggaat tttttgttt catgtctcag 1200
atttatttg tatttctttt ttaacctct acatttcct tgttttttaa 1250
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acatgtcaat gtggctagt ttattttct tgtttgcat tatgtgatg 1350
gcctgaagtg ttggacttgc aaaaggggaa gaaaggaatt gcgaatacat 1400
gtaaaaatgc accagacatt tgtattatt ttatcatgaa atcatgttt 1450
tctctgattg ttctgaaatg ttctaaatac tcttatttg aatgcacaaa 1500
atgacttaaa ccattcatat catgtttcct ttgcgttcag ccaatttcaa 1550
ttaaatagaa ctaaattaaa aa 1572

<210> 14

<211> 234

<212> PRT

<213> Homo Sapien

<400> 14

Met Asn His Leu Pro Glu Asp Met Glu Asn Ala Leu Thr Gly Ser

1 5 10 15

Gln Ser Ser His Ala Ser Leu Arg Asn Ile His Ser Ile Asn Pro

20 25 30

Thr Gln Leu Met Ala Arg Ile Glu Ser Tyr Glu Gly Arg Glu Lys

35 40 45

Lys Gly Ile Ser Asp Val Arg Arg Thr Phe Cys Leu Phe Val Thr

50 55 60

Phe Asp Leu Leu Phe Val Thr Leu Leu Trp Ile Ile Glu Leu Asn

Sequence Listing - P3230R1C1.txt

65	70	75
Val Asn Gly Gly Ile Glu Asn Thr Leu Glu Lys Glu Val Met Gln		
80	85	90
Tyr Asp Tyr Tyr Ser Ser Tyr Phe Asp Ile Phe Leu Leu Ala Val		
95	100	105
Phe Arg Phe Lys Val Leu Ile Leu Ala Tyr Ala Val Cys Arg Leu		
110	115	120
Arg His Trp Trp Ala Ile Ala Leu Thr Thr Ala Val Thr Ser Ala		
125	130	135
Phe Leu Leu Ala Lys Val Ile Leu Ser Lys Leu Phe Ser Gln Gly		
140	145	150
Ala Phe Gly Tyr Val Leu Pro Ile Ile Ser Phe Ile Leu Ala Trp		
155	160	165
Ile Glu Thr Trp Phe Leu Asp Phe Lys Val Leu Pro Gln Glu Ala		
170	175	180
Glu Glu Glu Asn Arg Leu Leu Ile Val Gln Asp Ala Ser Glu Arg		
185	190	195
Ala Ala Leu Ile Pro Gly Gly Leu Ser Asp Gly Gln Phe Tyr Ser		
200	205	210
Pro Pro Glu Ser Glu Ala Gly Ser Glu Glu Ala Glu Glu Lys Gln		
215	220	225
Asp Ser Glu Lys Pro Leu Leu Glu Leu		
230		

<210> 15

<211> 2768

<212> DNA

<213> Homo Sapien

<400> 15

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caggaaagac tgaggccgcg gcctgcccc cccggctccc tgcgccgcg 100

ccgctcccc ggacagaaga tgtgtccag ggtccctcg ctgctgccg 150

tgctctgct actggccctg gggcctggg tgagggctg cccatccgc 200

tgccagtga gccagccaca gacagtcttgc actgccc gccaggggac 250

cacggtgcc cgagacgtgc caccgacac ggtggggctg tacgtctttg 300

agaacggcat caccatgctc gacgcaggca gcttgccgg cctgcccggc 350

Sequence Listing - P3230R1C1.txt

ctgcagctcc tggacctgtc acagaaccag atcgccagcc tgcccagcgg 400
 ggtcttccag ccactcgcca acctcagcaa cctggacctg acggccaaca 450
 ggtctgatga aatcaccaat gagaccttcc gtggcctgcg ggcctctgag 500
 cgcctctacc tgggcaagaa cgcacccgc cacatccagc ctggtgcctt 550
 cgacacgctc gaccgcttcc tggagctcaa gctgcaggac aacgagctgc 600
 gggcactgcc cccgctgcgc ctgccccgcc tgtctgtct ggacctcagc 650
 cacaacagcc tcttggccct ggagcccgcc atcttggaaca ctgccaacgt 700
 ggaggcgctg cggctggctg gtctggggct gcagcagctg gacgaggggc 750
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 cgaggcccg ggtgcgggag cccacagcct tgtcttctag cttggctcct 1250
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 cactgcccc ccgactgtag ggctgttccc ccagcccag gactgccac 1350
 cgtccacctg cctcaatggg ggcacatgcc acctggggac acggcaccac 1400
 ctggcgtgct tgtgcccga aggtctcac ggctgtact gtgagagcca 1450
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 ccgtctcacc tatcgcaacc tatcgggccc tgataagcgg ctggtgacgc 1650
 tgcactgcc tgcctcgtc gctgagtaca cggtcacca gctgcggccc 1700
 aacgccactt actcgtctg tgtcatgctt ttggggccc ggcggtgccc 1750

Sequence Listing - P3230R1C1.txt

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 attgccccg ccctggccgc ggtgctcctg gccgcgctgg ctgcggtggg 1900
 ggagcgtac tgtgtcggc gggggcgggc catggcagca gcggctcagg 1950
 acaaaggga ggtggggcca ggggctgggc ccctggaact ggagggagtg 2000
 aagggtccct tggagccagg ccgaaggca acagagggcg gtggagaggc 2050
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 ctggctcca gtcaccctc cagcaaaagc cctacatcta agccagagag 2150
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 tctgtgccc acaccacgta agttctcagt cccaacctcg gggatgtgtg 2250
 cagacagggc tgtgtgacca cagctgggcc ctgtccctc tggacctcgg 2300
 tctctcatc tgtgagatgc tgtggccag ctgacgagcc ctaacgtccc 2350
 cagaaccgag tgcctatgag gacagtgtcc gcctgcctc ccgaacgtg 2400
 cagtccttgg gcacggcggg ccctgcatg tgctggtaac gcatgcctgg 2450
 gtctgtctgg gctctccac tcaggcggga ccctgggggc cagtgaagga 2500
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 gtcttggccc caggaagcga aggaacaaaa gaaactggaa aggaagatgc 2600
 ttttagaaca tgttttgctt ttttaaaata tatatatta taagagatcc 2650
 ttcccatTT attctgggaa gatgttttc aaactcagag acaaggactt 2700
 tggttttgt aagacaaacg atgatatgaa ggcctttgt aagaaaaaat 2750
 aaaagatgaa gttgtaaa 2768

<210> 16

<211> 673

<212> PRT

<213> Homo Sapien

<400> 16

Met	Cys	Ser	Arg	Val	Pro	Leu	Leu	Leu	Pro	Leu	Leu	Leu	Leu	Leu	
1				5				10				15			
Ala	Leu	Gly	Pro	Gly	Val	Gln	Gly	Cys	Pro	Ser	Gly	Cys	Gln	Cys	
	20					25					30				

Sequence Listing - P3230R1C1.txt

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Ser Gln Pro Gln Thr Val Phe Cys Thr Ala Arg Gln Gly Thr Thr
   35              40              45

Val Pro Arg Asp Val Pro Pro Asp Thr Val Gly Leu Tyr Val Phe
   50              55              60

Glu Asn Gly Ile Thr Met Leu Asp Ala Gly Ser Phe Ala Gly Leu
   65              70              75

Pro Gly Leu Gln Leu Leu Asp Leu Ser Gln Asn Gln Ile Ala Ser
   80              85              90

Leu Pro Ser Gly Val Phe Gln Pro Leu Ala Asn Leu Ser Asn Leu
   95              100             105

Asp Leu Thr Ala Asn Arg Leu His Glu Ile Thr Asn Glu Thr Phe
  110              115              120

Arg Gly Leu Arg Arg Leu Glu Arg Leu Tyr Leu Gly Lys Asn Arg
  125              130              135

Ile Arg His Ile Gln Pro Gly Ala Phe Asp Thr Leu Asp Arg Leu
  140              145              150

Leu Glu Leu Lys Leu Gln Asp Asn Glu Leu Arg Ala Leu Pro Pro
  155              160              165

Leu Arg Leu Pro Arg Leu Leu Leu Leu Asp Leu Ser His Asn Ser
  170              175              180

Leu Leu Ala Leu Glu Pro Gly Ile Leu Asp Thr Ala Asn Val Glu
  185              190              195

Ala Leu Arg Leu Ala Gly Leu Gly Leu Gln Gln Leu Asp Glu Gly
  200              205              210

Leu Phe Ser Arg Leu Arg Asn Leu His Asp Leu Asp Val Ser Asp
  215              220              225

Asn Gln Leu Glu Arg Val Pro Pro Val Ile Arg Gly Leu Arg Gly
  230              235              240

Leu Thr Arg Leu Arg Leu Ala Gly Asn Thr Arg Ile Ala Gln Leu
  245              250              255

Arg Pro Glu Asp Leu Ala Gly Leu Ala Ala Leu Gln Glu Leu Asp
  260              265              270

Val Ser Asn Leu Ser Leu Gln Ala Leu Pro Gly Asp Leu Ser Gly
  275              280              285

Leu Phe Pro Arg Leu Arg Leu Leu Ala Ala Ala Arg Asn Pro Phe
  290              295              300

Asn Cys Val Cys Pro Leu Ser Trp Phe Gly Pro Trp Val Arg Glu

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Sequence Listing - P3230R1C1.txt

305	310	315
Ser His Val Thr Leu Ala Ser Pro Glu Glu Thr Arg Cys His Phe		
320	325	330
Pro Pro Lys Asn Ala Gly Arg Leu Leu Leu Glu Leu Asp Tyr Ala		
335	340	345
Asp Phe Gly Cys Pro Ala Thr Thr Thr Thr Ala Thr Val Pro Thr		
350	355	360
Thr Arg Pro Val Val Arg Glu Pro Thr Ala Leu Ser Ser Ser Leu		
365	370	375
Ala Pro Thr Trp Leu Ser Pro Thr Ala Pro Ala Thr Glu Ala Pro		
380	385	390
Ser Pro Pro Ser Thr Ala Pro Pro Thr Val Gly Pro Val Pro Gln		
395	400	405
Pro Gln Asp Cys Pro Pro Ser Thr Cys Leu Asn Gly Gly Thr Cys		
410	415	420
His Leu Gly Thr Arg His His Leu Ala Cys Leu Cys Pro Glu Gly		
425	430	435
Phe Thr Gly Leu Tyr Cys Glu Ser Gln Met Gly Gln Gly Thr Arg		
440	445	450
Pro Ser Pro Thr Pro Val Thr Pro Arg Pro Pro Arg Ser Leu Thr		
455	460	465
Leu Gly Ile Glu Pro Val Ser Pro Thr Ser Leu Arg Val Gly Leu		
470	475	480
Gln Arg Tyr Leu Gln Gly Ser Ser Val Gln Leu Arg Ser Leu Arg		
485	490	495
Leu Thr Tyr Arg Asn Leu Ser Gly Pro Asp Lys Arg Leu Val Thr		
500	505	510
Leu Arg Leu Pro Ala Ser Leu Ala Glu Tyr Thr Val Thr Gln Leu		
515	520	525
Arg Pro Asn Ala Thr Tyr Ser Val Cys Val Met Pro Leu Gly Pro		
530	535	540
Gly Arg Val Pro Glu Gly Glu Glu Ala Cys Gly Glu Ala His Thr		
545	550	555
Pro Pro Ala Val His Ser Asn His Ala Pro Val Thr Gln Ala Arg		
560	565	570
Glu Gly Asn Leu Pro Leu Leu Ile Ala Pro Ala Leu Ala Val		
575	580	585

Sequence Listing - P3230R1C1.txt

Leu Leu Ala Ala Leu Ala Ala Val Gly Ala Ala Tyr Cys Val Arg
590 595 600

Arg Gly Arg Ala Met Ala Ala Ala Gln Asp Lys Gly Gln Val
605 610 615

Gly Pro Gly Ala Gly Pro Leu Glu Leu Glu Gly Val Lys Val Pro
620 625 630

Leu Glu Pro Gly Pro Lys Ala Thr Glu Gly Gly Gly Glu Ala Leu
635 640 645

Pro Ser Gly Ser Glu Cys Glu Val Pro Leu Met Gly Phe Pro Gly
650 655 660

Pro Gly Leu Gln Ser Pro Leu His Ala Lys Pro Tyr Ile
665 670

<210> 17

<211> 1672

<212> DNA

<213> Homo Sapien

<400> 17

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gcgacagctc atgcgggtcc ggatagggtc gacgctgctg ctgtgtgcgg 100

tgctgctgag cttggcctcg gcgtcctcgg atgaagaagg cagccaggat 150

gaatccttag attccaagac tactttgaca tcagatgagt cagtaaagga 200

ccatactact gcaggcagag tagttgctgg tcaaatattt cttgattcag 250

aagaatctga attagaatcc tctattcaag aagaggaaga cagcctcaag 300

agccaagagg gggaaagtgt cacagaagat atcagctttc tagagtctcc 350

aaatccagaa aacaaggact atgaagagcc aaagaaagta cggaaccagg 400

ctttgaccgc cattgaaggc acagcacatg gggagccctg ccacttccct 450

tttcttttc tagataagga gtatgatgaa tgtacatcag atgggaggga 500

agatggcaga ctgtggtgtg ctacaaccta tgactacaaa gcagatgaaa 550

agtggggcct ttgtgaaact gaagaagagg ctgctaagag acggcagatg 600

caggaagcag aaatgatgta tcaactgga atgaaaatcc ttaatggaag 650

caataagaaa agccaaaaaa gagaagcata tcggtatctc caaaaggcag 700

caagcatgaa ccataccaaa gccctggaga gagtgtcata tgctctttta 750

tttggtgatt acttgccaca gaatatccag gcagcgagag agatgtttga 800

Sequence Listing - P3230R1C1.txt

gaagctgact gaggaaggct ctccaaggg acagactgct ctggcttcc 850
 tgatgcctc tggacttggc gtttaattcaa gtcaggcaaa ggctcttcta 900
 tattatacat ttggagctct tgggggcaat ctaatagccc acatgtttt 950
 ggtaagtaga ctttagtgga aggcataaa tattaacatc agaagaattt 1000
 gtgtttata gcggccacaa ctttttcagc ttcatgac cagattgtct 1050
 tgtattaaga ccaaatattc agttgaactt cttcaaatt ctgttaattg 1100
 gatataacac atggaatcta catgtaaatg aaagttgggtg gagtccacaa 1150
 tttttctta aaatgattag ttggctgat tgccctctaa aagagagatc 1200
 tgataaatgg ctctttttaa attttctctg agttggaatt gtcagaatca 1250
 tttttacat tagattatca taattttaa aattttctt tagttttca 1300
 aaattttgta aatgggtgct atagaaaac aacatgaaat attatacaat 1350
 attttgaac aatgccctaa gaattgttaa aattcatgga gttattgtg 1400
 cagaatgact ccagagagct ctacttctg tttttactt tcatgattg 1450
 gctgtcttc catttattct ggtcatttat tgctagtgac actgtgcctg 1500
 ctccagtag tctcatttc cctattttgc taattgtta cttttcttt 1550
 gctaattgg aagattaact catttttaaa aaaattatgt ctaagattaa 1600
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1650
 aaaaaaaaaa aaaaaaaaaa aa 1672

<210> 18

<211> 301

<212> PRT

<213> Homo Sapien

<400> 18

Met	Arg	Val	Arg	Ile	Gly	Leu	Thr	Leu	Leu	Leu	Cys	Ala	Val	Leu
1		5			10			15						
Leu	Ser	Leu	Ala	Ser	Ala	Ser	Ser	Asp	Glu	Glu	Gly	Ser	Gln	Asp
	20				25			30						

Glu	Ser	Leu	Asp	Ser	Lys	Thr	Thr	Leu	Thr	Ser	Asp	Glu	Ser	Val
	35				40			45						

Lys	Asp	His	Thr	Thr	Ala	Gly	Arg	Val	Val	Ala	Gly	Gln	Ile	Phe
	50				55			60						

Leu	Asp	Ser	Glu	Glu	Ser	Glu	Leu	Glu	Ser	Ser	Ile	Gln	Glu	Glu
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Sequence Listing - P3230R1C1.txt

65	70	75
Glu Asp Ser Leu Lys Ser	Gln Glu Gly Glu Ser Val Thr Glu Asp	
80	85	90
Ile Ser Phe Leu Glu Ser	Pro Asn Pro Glu Asn Lys Asp Tyr Glu	
95	100	105
Glu Pro Lys Lys Val Arg	Lys Pro Ala Leu Thr Ala Ile Glu Gly	
110	115	120
Thr Ala His Gly Glu Pro	Cys His Phe Pro Phe Leu Phe Leu Asp	
125	130	135
Lys Glu Tyr Asp Glu Cys	Thr Ser Asp Gly Arg Glu Asp Gly Arg	
140	145	150
Leu Trp Cys Ala Thr Thr	Tyr Asp Tyr Lys Ala Asp Glu Lys Trp	
155	160	165
Gly Phe Cys Glu Thr Glu	Glu Glu Ala Ala Lys Arg Arg Gln Met	
170	175	180
Gln Glu Ala Glu Met Met	Tyr Gln Thr Gly Met Lys Ile Leu Asn	
185	190	195
Gly Ser Asn Lys Lys Ser	Gln Lys Arg Glu Ala Tyr Arg Tyr Leu	
200	205	210
Gln Lys Ala Ala Ser Met	Asn His Thr Lys Ala Leu Glu Arg Val	
215	220	225
Ser Tyr Ala Leu Leu Phe	Gly Asp Tyr Leu Pro Gln Asn Ile Gln	
230	235	240
Ala Ala Arg Glu Met Phe	Glu Lys Leu Thr Glu Glu Gly Ser Pro	
245	250	255
Lys Gly Gln Thr Ala Leu	Gly Phe Leu Tyr Ala Ser Gly Leu Gly	
260	265	270
Val Asn Ser Ser Gln Ala	Lys Ala Leu Val Tyr Tyr Thr Phe Gly	
275	280	285
Ala Leu Gly Gly Asn Leu	Ile Ala His Met Val Leu Val Ser Arg	
290	295	300

Leu

<210> 19

<211> 1508

<212> DNA

<213> Homo Sapien

Sequence Listing - P3230R1C1.txt

<400> 19

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agggggaaaa atgctctttt ggggtctagg cctcctaate ctctgtggtt 150
ttctgtggac tcgtaaagga aaactaaaga ttgaagacat cactgataag 200
tacattttta tcactgggat tgactcgggc ttggaaact tggcagccag 250
aacttttgat aaaaagggat ttcatgtaat cgctgcctgt ctgactgaat 300
caggatcaac agctttaaag gcagaaacct cagagagact tcgtactgtg 350
cttctgggatg tgaccgacct agagaatgtc aagaggactg cccagtgggt 400
gaagaaccaa gttggggaga aaggctctctg ggggtctgac aataatgctg 450
gtgttccccg cgtgctggct cccactgact ggctgacact agaggactac 500
agagaaccta ttgaagtga cctgtttgga ctcatcagtg tgacactaaa 550
tatgcttctt ttggtcaaga aagctcaagg gagagttatt aatgtctcca 600
gtgttgaggg tcgccttgca atcgttgag ggggctatac tcatccaaa 650
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tgggtgtcac gtctcatgca ttgaaccagg attgttcaa acaacttg 750
cagatccagt aaaggtaatt gaaaaaaaac tcgccatttg ggagcagctg 800
tctccagaca tcaacaaca atatggagaa gggtacattg aaaaagtct 850
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tggtagagtg catggaccac gctctaaca gctcttccc taagactcat 950
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gccagcagct ttgaagact ttttattgtt gaaacagaaa gcagagctgg 1050
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agggagtcct accatcgtg gtggtatccc agggctcctg ctcaagttt 1250
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gtatttaggc ttgcctgct tgggtgatg taagggaat tgaaagactt 1350

Sequence Listing - P3230R1C1.txt

gccccattcaa aatgatcttt accgtggcct gccccatgct tatgtcccc 1400

agcatttaca gtaacttggt aatgttaagt atcatctctt atctaaatat 1450

taaaagataa gtcaacccaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1500

aaaaaaaa 1508

<210> 20

<211> 319

<212> PRT

<213> Homo Sapien

<400> 20

Met Leu Phe Trp Val Leu Gly Leu Leu Ile Leu Cys Gly Phe Leu
1 5 10 15

Trp Thr Arg Lys Gly Lys Leu Lys Ile Glu Asp Ile Thr Asp Lys
20 25 30

Tyr Ile Phe Ile Thr Gly Cys Asp Ser Gly Phe Gly Asn Leu Ala
35 40 45

Ala Arg Thr Phe Asp Lys Lys Gly Phe His Val Ile Ala Ala Cys
50 55 60

Leu Thr Glu Ser Gly Ser Thr Ala Leu Lys Ala Glu Thr Ser Glu
65 70 75

Arg Leu Arg Thr Val Leu Leu Asp Val Thr Asp Pro Glu Asn Val
80 85 90

Lys Arg Thr Ala Gln Trp Val Lys Asn Gln Val Gly Glu Lys Gly
95 100 105

Leu Trp Gly Leu Ile Asn Asn Ala Gly Val Pro Gly Val Leu Ala
110 115 120

Pro Thr Asp Trp Leu Thr Leu Glu Asp Tyr Arg Glu Pro Ile Glu
125 130 135

Val Asn Leu Phe Gly Leu Ile Ser Val Thr Leu Asn Met Leu Pro
140 145 150

Leu Val Lys Lys Ala Gln Gly Arg Val Ile Asn Val Ser Ser Val
155 160 165

Gly Gly Arg Leu Ala Ile Val Gly Gly Gly Tyr Thr Pro Ser Lys
170 175 180

Tyr Ala Val Glu Gly Phe Asn Asp Ser Leu Arg Arg Asp Met Lys
185 190 195

Ala Phe Gly Val His Val Ser Cys Ile Glu Pro Gly Leu Phe Lys
200 205 210

Sequence Listing - P3230R1C1.txt

Thr Asn Leu Ala Asp Pro Val Lys Val Ile Glu Lys Lys Leu Ala
 215 220 225

Ile Trp Glu Gln Leu Ser Pro Asp Ile Lys Gln Gln Tyr Gly Glu
 230 235 240

Gly Tyr Ile Glu Lys Ser Leu Asp Lys Leu Lys Gly Asn Lys Ser
 245 250 255

Tyr Val Asn Met Asp Leu Ser Pro Val Val Glu Cys Met Asp His
 260 265 270

Ala Leu Thr Ser Leu Phe Pro Lys Thr His Tyr Ala Ala Gly Lys
 275 280 285

Asp Ala Lys Ile Phe Trp Ile Pro Leu Ser His Met Pro Ala Ala
 290 295 300

Leu Gln Asp Phe Leu Leu Leu Lys Gln Lys Ala Glu Leu Ala Asn
 305 310 315

Pro Lys Ala Val

<210> 21

<211> 1849

<212> DNA

<213> Homo Sapien

<400> 21

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gctttgtgct cggcgcactc gctttccagc acctcaacac ggactcggac 100

acggaaggtt ttcttcttgg ggaagtaaaa ggtgaagcca agaacagcat 150

tactgattcc caaatggatg atgttgaagt tgtttataca attgacattc 200

agaaatatat tccatgctat cagcttttta gcttttataa ttcttcaggc 250

gaagtaaatg agcaagcact gaagaaaata ttatcaaatg tcaaaaagaa 300

tgtggtaggt tggtaacaaat tccgtctgca ttcagatcag atcatgacgt 350

ttagagagag gctgcttcac aaaaacttgc aggagcattt ttcaaaccaa 400

gacctgtttt ttctgctatt aacaccaagt ataataacag aaagctgctc 450

tactcatcga ctggaacatt cctttataaa acctcaaaaa ggacttttcc 500

acaggggtacc tttagtggtt gccaatctgg gcatgtctga acaactgggt 550

tataaaactg tatcagggtc ctgtatgtcc actggtttta gccgagcagt 600

Sequence Listing - P3230R1C1.txt

acaaacacac agctctaaat ttttgaaga agatggatcc ttaaaggagg 650
 tacataagat aaatgaaatg tatgtctcat tacaagagga attaaagagt 700
 atatgcaaaa aagtgggaaga cagtgaacaa gcagtagata aactagtaaa 750
 ggagttaaac agattaaac gagaaattga gaaaggaga ggagcacaga 800
 ttcaggcagc aagagagaag aacatccaaa aagaccctca ggagaacatt 850
 tttcttggc aggcattacg gaccttttt ccaaattctg aatttctca 900
 ttcattgttt atgtctttaa aaaatagaca tgttctaaa agtagctgta 950
 actacaacca ccattctgat gtagtagaca atctgacctt aatggtagaa 1000
 cacactgaca ttctgaagc tagtccagct agtacaccac aaatcattaa 1050
 gcaataagcc ttgacttag atgacagatg gcaattcaag agatctcgg 1100
 tgttagatac acaagacaaa cgatctaaag caaatactgg tagtagtaac 1150
 caagataaag catccaaaat gacgagccca gaaacagatg aagaaattga 1200
 aaagatgaag ggttttgggt aatattcacg gtctctaca ttttgatct 1250
 ttaacctta caaggagatt tttttattg gctgatgggt aaagccaac 1300
 atttctattg ttttactat gttgagctac ttgcagtaag ttcattgtt 1350
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 ttttttcac ctttactaa gttgttgagg ggaaggctta cacagacaca 1500
 ttcttagaa ttggaaaagt gagaccaggc acagtggctc acacctgtaa 1550
 tcccagcact tagggaagac aagtcaggag gattgattga agctaggagt 1600
 tagagaccag cctgggcaac gtattgagac catgtctatt aaaaaataa 1650
 atggaagaag aagaatagcc ttatttcaa aatatggaaa gaaatttata 1700
 tgaaaattta tctgagtcac taaaattctc cttaagtgat acttttttag 1750
 aagtacatta tggctagagt tgccagataa aatgctggat atcatgcaat 1800
 aaatttgcaa aacatcatct aaaattttaa aaaaaaaaaa aaaaaaaaa 1849

<210> 22

<211> 409

<212> PRT

<213> Homo Sapien

Sequence Listing - P3230R1C1.txt

<400> 22

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Met Glu Gly Glu Ser Thr Ser Ala Val Leu Ser Gly Phe Val Leu
 1           5           10          15

Gly Ala Leu Ala Phe Gln His Leu Asn Thr Asp Ser Asp Thr Glu
 20          25          30

Gly Phe Leu Leu Gly Glu Val Lys Gly Glu Ala Lys Asn Ser Ile
 35          40          45

Thr Asp Ser Gln Met Asp Asp Val Glu Val Val Tyr Thr Ile Asp
 50          55          60

Ile Gln Lys Tyr Ile Pro Cys Tyr Gln Leu Phe Ser Phe Tyr Asn
 65          70          75
Ser Ser Gly Glu Val Asn Glu Gln Ala Leu Lys Lys Ile Leu Ser
 80          85          90

Asn Val Lys Lys Asn Val Val Gly Trp Tyr Lys Phe Arg Arg His
 95          100         105

Ser Asp Gln Ile Met Thr Phe Arg Glu Arg Leu Leu His Lys Asn
 110         115         120

Leu Gln Glu His Phe Ser Asn Gln Asp Leu Val Phe Leu Leu Leu
 125         130         135

Thr Pro Ser Ile Ile Thr Glu Ser Cys Ser Thr His Arg Leu Glu
 140         145         150

His Ser Leu Tyr Lys Pro Gln Lys Gly Leu Phe His Arg Val Pro
 155         160         165

Leu Val Val Ala Asn Leu Gly Met Ser Glu Gln Leu Gly Tyr Lys
 170         175         180

Thr Val Ser Gly Ser Cys Met Ser Thr Gly Phe Ser Arg Ala Val
 185         190         195

Gln Thr His Ser Ser Lys Phe Phe Glu Glu Asp Gly Ser Leu Lys
 200         205         210

Glu Val His Lys Ile Asn Glu Met Tyr Ala Ser Leu Gln Glu Glu
 215         220         225

Leu Lys Ser Ile Cys Lys Lys Val Glu Asp Ser Glu Gln Ala Val
 230         235         240

Asp Lys Leu Val Lys Asp Val Asn Arg Leu Lys Arg Glu Ile Glu
 245         250         255

Lys Arg Arg Gly Ala Gln Ile Gln Ala Ala Arg Glu Lys Asn Ile
 260         265         270

Gln Lys Asp Pro Gln Glu Asn Ile Phe Leu Cys Gln Ala Leu Arg

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Sequence Listing - P3230R1C1.txt

275	280	285
Thr Phe Phe Pro Asn Ser Glu Phe Leu His Ser Cys Val Met Ser		
290	295	300
Leu Lys Asn Arg His Val Ser Lys Ser Ser Cys Asn Tyr Asn His		
305	310	315
His Leu Asp Val Val Asp Asn Leu Thr Leu Met Val Glu His Thr		
320	325	330
Asp Ile Pro Glu Ala Ser Pro Ala Ser Thr Pro Gln Ile Ile Lys		
335	340	345
His Lys Ala Leu Asp Leu Asp Asp Arg Trp Gln Phe Lys Arg Ser		
350	355	360
Arg Leu Leu Asp Thr Gln Asp Lys Arg Ser Lys Ala Asn Thr Gly		
365	370	375
Ser Ser Asn Gln Asp Lys Ala Ser Lys Met Ser Ser Pro Glu Thr		
380	385	390
Asp Glu Glu Ile Glu Lys Met Lys Gly Phe Gly Glu Tyr Ser Arg		
395	400	405
Ser Pro Thr Phe		

<210> 23

<211> 2651

<212> DNA

<213> Homo Sapien

<400> 23

ggcacagccg cgcgggcgag ggcagagtc gccgagccga gtccagccgg 50
 acgagcgagc cagcgccagg cagcccaagc agcgcgcagc gaacgcccgc 100
 cgccgcccac accctctgcg gtccccgagg cgctgcccac cttccctcc 150
 ttccccgct ccccgctcg ccggccagtc agcttgccgg gttcgctgcc 200
 ccggaacc ccgaggtcac cagccgcgc ctctgttcc ctgggcccgc 250
 cgccgctcc acgcccctct tctccctgg ccggcgctt ggcaccgggg 300
 accgttgctt gacgcgaggc ccagctctac ttttcgccc cggtctctc 350
 cgctgtctg cctcttcac caactcaac tccttctcc tccagctcca 400
 ctgcctagtc ccgactccg ccagccctcg gcccgctgcc gtagcgccgc 450
 ttccggtcgg gtcccaaagg tgggaacgcg tccgccccgg cccgcacat 500

Sequence Listing - P3230R1C1.txt

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 ccgcgctgct ggctgcccag ctcaagtcca aaagtgtctc ggaagtgcga 600
 cgtcttttacg tgtccaaagg ctccaacaag aacgatgccc cctccacga 650
 gatcaacggg gatcatttga agatctgtcc ccagggttct acctgtgct 700
 ctcaagagat ggaggagaag tacagcctgc aaagtaaaga tgatttcaa 750
 agtgtgggtca gcgaacagtg caatcatttg caagctgtct ttgcttcacg 800
 ttacaagaag tttgatgaat tcttcaaga actactgaa aatgcagaga 850
 aatccctgaa tgatatgttt gtgaagacat atggccattt atacatgcaa 900
 aattctgagc tatttaaaga tctcttcgta gagtggaaac gttactacgt 950
 ggtgggaaat gtgaacctgg aagaaatgct aaatgacttc tgggctcgcc 1000
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 gagtatctgg aatgtgtgag caagtatacg gagcagctga agcccttcgg 1100
 agatgtccct cgcaaattga agctccaggt tactcgtgct ttgttagcag 1150
 ccgctacttt cgctcaaggc ttacgggttg cgggagatgt cgtgagcaag 1200
 gtcccggtgg taaacccac agccagtggt acccatgccc tgttgaagat 1250
 gatctactgc tccactgcc ggggtctcgt gactgtgaag ccatgttaca 1300
 actactgctc aaacatcatg agaggctgtt tggccaacca aggggatctc 1350
 gattttgaat ggaacaattt catagatgct atgctgatgg tggcagagag 1400
 gctagagggg cctttcaaca ttgaatcggg catggatccc atcgatgtga 1450
 agatttctga tgctattatg aacatgcagg ataatagtgt tcaagtgtct 1500
 cagaagggtt tcaggggatg tggaccccc aagcccctcc agctggagc 1550
 aatttctcgt tccatctctg aaagtgcctt cagtgtctgc ttcagaccac 1600
 atcaccccca ggaacgcccc accacagcag ctggcactag ttggaccga 1650
 ctggttactg atgtcaagga gaaactgaaa caggccaaga aattctgttc 1700
 ctcccttcgc agcaacgttt gcaacgatga gaggatggct gcaggaaacg 1750
 gcaatgagga tgactgttgg aatgggaaa gcaaaagcag gtacctgttt 1800
 gcagtgcacg gaaatggatt agccaaccag ggcaacaacc cagaggtcca 1850
 ggttgacacc agcaaacagc acatactgat cttcgtgcaa atcatggctc 1900

Sequence Listing - P3230R1C1.txt

ttcagatgat gaccagcaag atgaagaatg catacaatgg gaacgacgtg 1950
gactcttttg atatcagtga tgaagtagt ggagaaggaa gtggaagtgg 2000
ctgtgagtat cagcagtgcc cttcagagtt tgactacaat gccactgacc 2050
atgtcgggaa gagtgccaat gagaagccg acagtgcctg tgctcgtcct 2100
ggggcacagg cctactcct cactgtcttc tgcactttgt tcttggttat 2150
gcagagagag tggagataat tctcaaacct tgagaaaaag tgttcacaa 2200
aaagttaaaa ggcaccagtt atcacttttc taccatccta gtgactttgc 2250
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ttaaagaagt gctgactttg tttctcatt cagttttggg aggaaaaggg 2350
actgtgcatt gagttgggtc ctgctcccc aaacctggtt aaactgtggt 2400
aacagtgtag gtacagaact atagttagtt gtgcattttg gattttatca 2450
ctctattatt tgtttgatg ttttttctc atttcgtttg tgggtttttt 2500
tttccaactg tgatctgcc ttgtttctta caagcaaacc aggttccctt 2550
cttggcacgt aacatgtacg tatttctgaa atattaaata gctgtacaga 2600
agcaggtttt ttttatcatg ttatcttatt aaaagaaaaa gcccaaaaag 2650
c 2651

<210> 24

<211> 556

<212> PRT

<213> Homo Sapien

<400> 24

Met Ala Arg Phe Gly Leu Pro Ala Leu Leu Cys Thr Leu Ala Val
1 5 10 15

Leu Ser Ala Ala Leu Leu Ala Ala Glu Leu Lys Ser Lys Ser Cys
20 25 30

Ser Glu Val Arg Arg Leu Tyr Val Ser Lys Gly Phe Asn Lys Asn
35 40 45

Asp Ala Pro Leu His Glu Ile Asn Gly Asp His Leu Lys Ile Cys
50 55 60

Pro Gln Gly Ser Thr Cys Cys Ser Gln Glu Met Glu Glu Lys Tyr
65 70 75

Ser Leu Gln Ser Lys Asp Asp Phe Lys Ser Val Val Ser Glu Gln
80 85 90

Sequence Listing - P3230R1C1.txt

Cys Asn His Leu Gln Ala Val Phe Ala Ser Arg Tyr Lys Lys Phe
 95 100 105
 Asp Glu Phe Phe Lys Glu Leu Leu Glu Asn Ala Glu Lys Ser Leu
 110 115 120
 Asn Asp Met Phe Val Lys Thr Tyr Gly His Leu Tyr Met Gln Asn
 125 130 135
 Ser Glu Leu Phe Lys Asp Leu Phe Val Glu Leu Lys Arg Tyr Tyr
 140 145 150
 Val Val Gly Asn Val Asn Leu Glu Glu Met Leu Asn Asp Phe Trp
 155 160 165
 Ala Arg Leu Leu Glu Arg Met Phe Arg Leu Val Asn Ser Gln Tyr
 170 175 180
 His Phe Thr Asp Glu Tyr Leu Glu Cys Val Ser Lys Tyr Thr Glu
 185 190 195
 Gln Leu Lys Pro Phe Gly Asp Val Pro Arg Lys Leu Lys Leu Gln
 200 205 210
 Val Thr Arg Ala Phe Val Ala Ala Arg Thr Phe Ala Gln Gly Leu
 215 220 225
 Ala Val Ala Gly Asp Val Val Ser Lys Val Ser Val Val Asn Pro
 230 235 240
 Thr Ala Gln Cys Thr His Ala Leu Leu Lys Met Ile Tyr Cys Ser
 245 250 255
 His Cys Arg Gly Leu Val Thr Val Lys Pro Cys Tyr Asn Tyr Cys
 260 265 270
 Ser Asn Ile Met Arg Gly Cys Leu Ala Asn Gln Gly Asp Leu Asp
 275 280 285
 Phe Glu Trp Asn Asn Phe Ile Asp Ala Met Leu Met Val Ala Glu
 290 295 300
 Arg Leu Glu Gly Pro Phe Asn Ile Glu Ser Val Met Asp Pro Ile
 305 310 315
 Asp Val Lys Ile Ser Asp Ala Ile Met Asn Met Gln Asp Asn Ser
 320 325 330
 Val Gln Val Ser Gln Lys Val Phe Gln Gly Cys Gly Pro Pro Lys
 335 340 345
 Pro Leu Pro Ala Gly Arg Ile Ser Arg Ser Ile Ser Glu Ser Ala
 350 355 360

Sequence Listing - P3230R1C1.txt

Phe Ser Ala Arg Phe Arg Pro His His Pro Glu Glu Arg Pro Thr
 365 370 375

Thr Ala Ala Gly Thr Ser Leu Asp Arg Leu Val Thr Asp Val Lys
 380 385 390

Glu Lys Leu Lys Gln Ala Lys Lys Phe Trp Ser Ser Leu Pro Ser
 395 400 405

Asn Val Cys Asn Asp Glu Arg Met Ala Ala Gly Asn Gly Asn Glu
 410 415 420

Asp Asp Cys Trp Asn Gly Lys Gly Lys Ser Arg Tyr Leu Phe Ala
 425 430 435

Val Thr Gly Asn Gly Leu Ala Asn Gln Gly Asn Asn Pro Glu Val
 440 445 450

Gln Val Asp Thr Ser Lys Pro Asp Ile Leu Ile Leu Arg Gln Ile
 455 460 465

Met Ala Leu Arg Val Met Thr Ser Lys Met Lys Asn Ala Tyr Asn
 470 475 480

Gly Asn Asp Val Asp Phe Phe Asp Ile Ser Asp Glu Ser Ser Gly
 485 490 495

Glu Gly Ser Gly Ser Gly Cys Glu Tyr Gln Gln Cys Pro Ser Glu
 500 505 510

Phe Asp Tyr Asn Ala Thr Asp His Ala Gly Lys Ser Ala Asn Glu
 515 520 525

Lys Ala Asp Ser Ala Gly Val Arg Pro Gly Ala Gln Ala Tyr Leu
 530 535 540

Leu Thr Val Phe Cys Ile Leu Phe Leu Val Met Gln Arg Glu Trp
 545 550 555

Arg

<210> 25

<211> 870

<212> DNA

<213> Homo Sapien

<400> 25

ctgccctca aatgggaacg ctggcctggg actaaagcat agaccaccag 50

gctgagtatc ctgacctgag tcatccccag ggatcaggag cctccagcag 100

ggaaccttcc attatattct tcaagcaact tacagctgca ccgacagttg 150

cgatgaaagt tctaattctt tccctctctc tgttgctgcc actaatgctg 200

Sequence Listing - P3230R1C1.txt

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 ggaccgaggg caggcttcta ggagatggct ccaggaaggg ggccaagaat 300
 gtgagtgcga agattggttc ctgagagccc cgagaagaaa attcatgaca 350
 gtgtctgggc tgccaaagaa gcagtgtccc tgtgatcatt tcaagggtcaa 400
 tgtgaagaaa acaagacacc aaaggcacca cagaagacca aacaagcatt 450
 ccagagcctg ccagcaattt ctcaacaat gtcagctaag aagctttgct 500
 ctgcctttgt aggagctctg agcgccact cttccaatta aacattctca 550
 gccaagaaga cagtgtgac acctaccaga cactcttctt ctcccacctc 600
 actctccac tgtaccacc cctaaatcat tccagtgtc tcaaaaagca 650
 tgttttcaa gatcattttg ttgtgtgctc tctctagtgt cttcttct 700
 cgtcagctct agcctgtgcc ctcccctac ccaggcttag gcttaattac 750
 ctgaagatt ccaggaaact gtagcttct agctagtgtc atttaacctt 800
 aatgcaatc aggaagtag caaacagaag tcaataataa tttttaaatg 850
 tcaaaaaaaaa aaaaaaaaaa 870

<210> 26

<211> 119

<212> PRT

<213> Homo Sapien

<400> 26

Met Lys Val Leu Ile Ser Ser Leu Leu Leu Leu Leu Pro Leu Met

1 5 10 15

Leu Met Ser Met Val Ser Ser Ser Leu Asn Pro Gly Val Ala Arg

20 25 30

Gly His Arg Asp Arg Gly Gln Ala Ser Arg Arg Trp Leu Gln Glu

35 40 45

Gly Gly Gln Glu Cys Glu Cys Lys Asp Trp Phe Leu Arg Ala Pro

50 55 60

Arg Arg Lys Phe Met Thr Val Ser Gly Leu Pro Lys Lys Gln Cys

65 70 75

Pro Cys Asp His Phe Lys Gly Asn Val Lys Lys Thr Arg His Gln

80 85 90

Arg His His Arg Lys Pro Asn Lys His Ser Arg Ala Cys Gln Gln

95 100 105

Phe Leu Lys Gln Cys Gln Leu Arg Ser Phe Ala Leu Pro Leu

110

115

<210> 27
 <211> 1371
 <212> DNA
 <213> Homo Sapien

<400> 27
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 ggaagcacag ctgagagctg gtctgccatg gacatcctgg tccactcct 100
 gcagctgctg gtgctgcttc ttaccctgcc cctgcacctc atggctctgc 150
 tgggtgctg gcagcccctg tgcaaaagct acttccccta cctgatggcc 200
 gtgctgactc ccaagagcaa ccgcaagatg gagagcaaga aacgggagct 250
 ctccagccag ataaaggggc ttacaggagc ctccgggaaa gtggccctac 300
 tggagctggg ctgcggaacc ggagccaact ttcagtctca ccaccgggc 350
 tgcagggtca cctgcctaga cccaaatccc cactttgaga agttctgac 400
 aaagagcatg gctgagaaca ggcacctcca atatgagcgg ttgtgtgtg 450
 ctcttgga gaagacatgaga cagctggctg atggctccat ggatgtgtg 500
 gtctgcactc tgggtgctgt ctctgtgcag agcccaagga aggtcctgca 550
 ggaggtccgg agagtactga gaccgggagg tgtgctctt ttctgggagc 600
 atgtggcaga accatatgga agctgggcct tcatgtggca gcaagtttc 650
 gagccacact ggaacacat tggggatggc tgcctcctca ccagagagac 700
 ctggaaggat cttgagaacg cccagttctc cgaaatecaa atggaacgac 750
 agccccctcc cttgaagtgg ctacctgttg ggccccacat catgggaaag 800
 gctgtcaaac aatcttccc aagctcaag gcactcattt gctcctccc 850
 cagcctccaa ttagaacaag ccaccacca gcctatctat ctccactga 900
 gaggaccta gcagaatgag agaagacatt catgtaccac ctactagtc 950
 ctctctccc aacctctgcc agggcaatct ctaactcaa tccgccttc 1000
 gacagtga aaagcttact tctacgtga cccaggaggg aaacactagg 1050
 accctgtgt atctcaact gcaagttct ggactagtct cccaacgtt 1100
 gcctcccaat gttgtcctt tctctgttc ccatggtaaa gctcctctg 1150
 cttctcctt gaggctacac ccatgcgtct ctaggaactg gtcacaaaag 1200

Sequence Listing - P3230R1C1.txt

tcatggtgcc tgcacccctg ccaagccccc ctgacctctc ctcccacta 1250
ccaccttctt cctgagctgg gggcaccagg gagaatcaga gatgctgggg 1300
atgccagagc aagactcaaa gaggcagagg tttgttctc aaatatttt 1350
taataaatag acgaaaccac g 1371

<210> 28
<211> 277
<212> PRT
<213> Homo Sapien

<400> 28
Met Asp Ile Leu Val Pro Leu Leu Gln Leu Leu Val Leu Leu Leu
1 5 10 15
Thr Leu Pro Leu His Leu Met Ala Leu Leu Gly Cys Trp Gln Pro
20 25 30
Leu Cys Lys Ser Tyr Phe Pro Tyr Leu Met Ala Val Leu Thr Pro
35 40 45
Lys Ser Asn Arg Lys Met Glu Ser Lys Lys Arg Glu Leu Phe Ser
50 55 60
Gln Ile Lys Gly Leu Thr Gly Ala Ser Gly Lys Val Ala Leu Leu
65 70 75
Glu Leu Gly Cys Gly Thr Gly Ala Asn Phe Gln Phe Tyr Pro Pro
80 85 90
Gly Cys Arg Val Thr Cys Leu Asp Pro Asn Pro His Phe Glu Lys
95 100 105
Phe Leu Thr Lys Ser Met Ala Glu Asn Arg His Leu Gln Tyr Glu
110 115 120
Arg Phe Val Val Ala Pro Gly Glu Asp Met Arg Gln Leu Ala Asp
125 130 135
Gly Ser Met Asp Val Val Val Cys Thr Leu Val Leu Cys Ser Val
140 145 150
Gln Ser Pro Arg Lys Val Leu Gln Glu Val Arg Arg Val Leu Arg
155 160 165
Pro Gly Gly Val Leu Phe Phe Trp Glu His Val Ala Glu Pro Tyr
170 175 180
Gly Ser Trp Ala Phe Met Trp Gln Gln Val Phe Glu Pro Thr Trp
185 190 195
Lys His Ile Gly Asp Gly Cys Cys Leu Thr Arg Glu Thr Trp Lys

Sequence Listing - P3230R1C1.txt

200 205 210

Asp Leu Glu Asn Ala Gln Phe Ser Glu Ile Gln Met Glu Arg Gln
215 220 225

Pro Pro Pro Leu Lys Trp Leu Pro Val Gly Pro His Ile Met Gly
230 235 240

Lys Ala Val Lys Gln Ser Phe Pro Ser Ser Lys Ala Leu Ile Cys
245 250 255

Ser Phe Pro Ser Leu Gln Leu Glu Gln Ala Thr His Gln Pro Ile
260 265 270

Tyr Leu Pro Leu Arg Gly Thr
275

<210> 29

<211> 494

<212> DNA

<213> Homo Sapien

<400> 29

caatgtttgc ctatccacct cccccaagcc cctttacctg tgctgctgct 50

aacgctgctg ctgctgctgc tgctgcttaa aggctcatgc ttggagtggg 100

gactgggtcg tgcccagaaa gtctcttctg ccactgacgc ccccatcagg 150

gattgggect tctttcccc tctcttctg tctctctgc ctcacggcc 200

tgccatgacc tgcagccaag ccagcccccg tggggaaggg gagaaagtgg 250

gggatggcta agaaagctgg gagataggga acagaagagg gtagtgggtg 300

ggctaggggg gctgccttat ttaaagtggg tgtttatgat tcttatacta 350

atztatataa agatattaag gccctgttca ttaagaatt gtcccttcc 400

cctgtgttca atgtttgtaa agattgttct gtgtaaatat gtctttataa 450

taaacagtta aaagctgaaa aaaaaaaaaa aaaaaaaaaa aaaa 494

<210> 30

<211> 73

<212> PRT

<213> Homo Sapien

<400> 30

Met Leu Leu Leu Thr Leu Leu Leu Leu Leu Leu Lys Gly
1 5 10 15

Ser Cys Leu Glu Trp Gly Leu Val Gly Ala Gln Lys Val Ser Ser
20 25 30

Sequence Listing - P3230R1C1.txt

Ala Thr Asp Ala Pro Ile Arg Asp Trp Ala Phe Phe Pro Pro Ser
35 40 45

Phe Leu Cys Leu Leu Pro His Arg Pro Ala Met Thr Cys Ser Gln
50 55 60
Ala Gln Pro Arg Gly Glu Gly Glu Lys Val Gly Asp Gly
65 70

<210> 31

<211> 1660

<212> DNA

<213> Homo Sapien

<400> 31

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cccgaggctac cagttcctcc aagcaagtca tttcccttat ttaaccgatg 100
tgtccctcaa acacctgagt gctactcctt atttgcattc gttttgataa 150
atgatgttga caccctccac cgaattctaa gtggaatcac gtcgggaaga 200
gatacaatcc ttggcctgtg tatcctcgca ttgacctgtt ctttgccat 250
gatgtttacc ttcagattca tcaccacctc tctggttcac attttcattt 300
cattggttat ttggggattg ttgtttgtct gcggtgtttt atgggtggctg 350
tattatgact ataccaacga cctcagcata gaattggaca cagaaagggg 400
aaatatgaag tgcgtgctgg ggtttgctat cgtatccaca ggcacacagg 450
cagtgcctgct cgtcttgatt tttgttcca gaaagagaat aaaattgaca 500
gttgagcttt tccaaatcac aaataaagcc atcagcagtg ctccttctct 550
gctgttcag ccactgtgga catttgccat cctcatttc tctgggtcc 600
tctgggtggc tgtgctgctg agcctgggaa ctgcaggagc tgcccagggt 650
atggaaggcg gccaaagtga atataagccc ctttcgggca ttcggtacat 700
tggtgcgtac catttaattg gcctcatctg gactagtga ttcaccttg 750
cgtgccagca aatgactata gctggggcag tggttacttg ttattcaac 800
agaagtaaaa atgactctcc tgatcatccc atcctttcgt ctctctccat 850
tctctcttc taccatcaag gaaccgtgtg gaaaggggta tttttaatct 900
ctgtggtgag gattccgaga atcattgtca tgtacatgca aaacgcactg 950
aaagaacagc agcatggtgc attgtccagg tacctgttcc gatgctgcta 1000
ctgctgtttc tgggtgtctg acaataacct gctccatctc aaccagaatg 1050

Sequence Listing - P3230R1C1.txt

catatactac aactgctatt aatgggacag atttctgtac atcagcaaaa 1100
 gatgcattca aaatctgtc caagaactca agtcacttta catctattaa 1150
 ctgctttgga gacttcataa ttttctagg aaagggtgta gtgggtgtt 1200
 tcactgttt tggaggactc atggcttta actacaatcg ggcattccag 1250
 gtgtgggcag tcctctgtt attggtagct tttttgcct acttagtagc 1300
 ccatagttt ttatctgtgt ttgaaactgt gctggatgca ctttctctgt 1350
 gttttctgt tgatctggaa acaaatgatg gatcgtcaga aaagccctac 1400
 ttatggatc aagaatttct gagtttcgta aaaaggagca acaaatataa 1450
 caatgcaagg gcacagcagg acaagcactc attaaggaat gagggaggaa 1500
 cagaactcca ggccattgtg agatagatac ccatttaggt atctgtacct 1550
 ggaaaacatt tccttctaag agccatttac agaatagaag atgagaccac 1600
 tagagaaaa ttagtgaatt ttttttaaa agacctataa aaccctattc 1650
 ttctcaaaa 1660

<210> 32

<211> 445

<212> PRT

<213> Homo Sapien

<400> 32

Met Ser Gly Arg Asp Thr Ile Leu Gly Leu Cys Ile Leu Ala Leu
 1 5 10 15

Ala Leu Ser Leu Ala Met Met Phe Thr Phe Arg Phe Ile Thr Thr
 20 25 30

Leu Leu Val His Ile Phe Ile Ser Leu Val Ile Leu Gly Leu Leu
 35 40 45

Phe Val Cys Gly Val Leu Trp Trp Leu Tyr Tyr Asp Tyr Thr Asn
 50 55 60

Asp Leu Ser Ile Glu Leu Asp Thr Glu Arg Glu Asn Met Lys Cys
 65 70 75

Val Leu Gly Phe Ala Ile Val Ser Thr Gly Ile Thr Ala Val Leu
 80 85 90

Leu Val Leu Ile Phe Val Leu Arg Lys Arg Ile Lys Leu Thr Val
 95 100 105

Glu Leu Phe Gln Ile Thr Asn Lys Ala Ile Ser Ser Ala Pro Phe
 110 115 120

Sequence Listing - P3230R1C1.txt

Leu Leu Phe Gln Pro Leu Trp Thr Phe Ala Ile Leu Ile Phe Phe
 125 130 135
 Trp Val Leu Trp Val Ala Val Leu Leu Ser Leu Gly Thr Ala Gly
 140 145 150
 Ala Ala Gln Val Met Glu Gly Gly Gln Val Glu Tyr Lys Pro Leu
 155 160 165
 Ser Gly Ile Arg Tyr Met Trp Ser Tyr His Leu Ile Gly Leu Ile
 170 175 180
 Trp Thr Ser Glu Phe Ile Leu Ala Cys Gln Gln Met Thr Ile Ala
 185 190 195
 Gly Ala Val Val Thr Cys Tyr Phe Asn Arg Ser Lys Asn Asp Pro
 200 205 210
 Pro Asp His Pro Ile Leu Ser Ser Leu Ser Ile Leu Phe Phe Tyr
 215 220 225
 His Gln Gly Thr Val Val Lys Gly Ser Phe Leu Ile Ser Val Val
 230 235 240
 Arg Ile Pro Arg Ile Ile Val Met Tyr Met Gln Asn Ala Leu Lys
 245 250 255
 Glu Gln Gln His Gly Ala Leu Ser Arg Tyr Leu Phe Arg Cys Cys
 260 265 270
 Tyr Cys Cys Phe Trp Cys Leu Asp Lys Tyr Leu Leu His Leu Asn
 275 280 285
 Gln Asn Ala Tyr Thr Thr Thr Ala Ile Asn Gly Thr Asp Phe Cys
 290 295 300
 Thr Ser Ala Lys Asp Ala Phe Lys Ile Leu Ser Lys Asn Ser Ser
 305 310 315
 His Phe Thr Ser Ile Asn Cys Phe Gly Asp Phe Ile Ile Phe Leu
 320 325 330
 Gly Lys Val Leu Val Val Cys Phe Thr Val Phe Gly Gly Leu Met
 335 340 345
 Ala Phe Asn Tyr Asn Arg Ala Phe Gln Val Trp Ala Val Pro Leu
 350 355 360
 Leu Leu Val Ala Phe Phe Ala Tyr Leu Val Ala His Ser Phe Leu
 365 370 375
 Ser Val Phe Glu Thr Val Leu Asp Ala Leu Phe Leu Cys Phe Ala
 380 385 390
 Val Asp Leu Glu Thr Asn Asp Gly Ser Ser Glu Lys Pro Tyr Phe

Sequence Listing - P3230R1C1.txt

395 400 405

Met Asp Gln Glu Phe Leu Ser Phe Val Lys Arg Ser Asn Lys Leu
410 415 420

Asn Asn Ala Arg Ala Gln Gln Asp Lys His Ser Leu Arg Asn Glu
425 430 435

Glu Gly Thr Glu Leu Gln Ala Ile Val Arg
440 445

<210> 33

<211> 2773

<212> DNA

<213> Homo Sapien

<400> 33

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aagggaaaaa gaattattcat tctgtgtggt gaaaatttt tgaaaaaaaa 150

attgccttct tcaaacaagg gtgtcattct gatatttatg aggactgttg 200

ttctcactat gaaggcatct gttattgaaa tgttccttgt tttgctgggt 250

actggagtac attcaacaa agaaacggca aagaagatta aaaggcccaa 300

gttcactgtg cctcagatca actgcgatgt caaagccgga aagatcatcg 350

atctgagtt cattgtgaaa tgtccagcag gatgccaaaga ccccaaatc 400

catgtttatg gcactgacgt gtatgcatcc tactccagtg tgtgtggcgc 450

tgccgtacac agtgggtgtgc ttgataattc aggagggaaa atactgttc 500

ggaaggttgc tggacagtct ggttacaaag ggagttattc caacggtgtc 550

caatcgttat ccttaccacg atggagagaa tcctttatcg tcttagaaag 600

taaacccaaa aagggtgtaa cctaccatc agctcttaca tactcatcat 650

cgaaaagtcc agctgcccaa gcaggtgaga ccacaaaagc ctatcagagg 700

ccacctattc cagggacaac tgcacagccg gtcactctga tgcagcttct 750

ggctgtcact gtatgtgtgg ccacccccac cacttgcca aggccatccc 800

cttctgtgc ttctaccacc agcatcccca gaccacaatc agtggggccac 850

aggagccagg agatggatct ctggctcact gccacctaca caagcagcca 900

aaacaggccc agagctgatac caggatatcca aaggcaagat ccttcaggag 950

ctgccttcca gaaacctgtt ggagcggatg tcagcctggg acttgttcca 1000

Sequence Listing - P3230R1C1.txt

aaagaagaat tgagcacaca gtctttggag ccagtatccc tgggagatcc 1050
 aaactgcaaa attgacttgt cgtttttaat tgatggggagc accagcattg 1100
 gcaaacggcg attccgaatc cagaagcagc tcttggtgta tgttgcccaa 1150
 gctcttgaca ttggccctgc cggtcactg atgggtgttg tccagtatgg 1200
 agacaaccct gctactcact ttaacctcaa gacacacagc aattctcgag 1250
 atctgaagac agccatagag aaaattactc agagaggagg actttctaata 1300
 gtaggtcggg ccatctcctt tgtgaccaag aacttctttt ccaaagccaa 1350
 tggaaacaga agcggggctc ccaatgtggt ggtggtgatg gtggatggct 1400
 ggcccacgga caaagtggag gaggtctcaa gacttgcgag agagtcagga 1450
 atcaacattt tcttcacac cattgaaggt gctgctgaaa atgagaagca 1500
 gtatgtgggt gagcccaact ttgcaacaa ggccgtgtgc agaacaacg 1550
 gcttctactc gctccacgtg cagagctggt ttggcctca caagaccctg 1600
 cagcctctgg tgaagcgggt ctgcgacact gaccgcctgg cctgcagcaa 1650
 gacctgcttg aactcggtg acattggctt cgctcatgac ggctcagca 1700
 gtgtggggac gggcaacttc cgcaccgtcc tccagtttgt gaccaactc 1750
 accaaagagt ttgagatttc cgacacggac acgcgcatcg gggccgtgca 1800
 gtacacctac gaacagcggc tggagtgttg gttcgacaag tacagcagca 1850
 agcctgacat cctcaacgcc atcaagaggg tgggctactg gagtgggtggc 1900
 accagcacgg gggctgcat caactcgcc ctggagcagc tcttcaagaa 1950
 gtccaagccc aacaagagga agttaatgat cctcatcacc gacgggaggt 2000
 cctacgacga cgtccggatc ccagccatgg ctgcccatct gaagggagtg 2050
 atcacctatg cgataggcgt tgcttgggt gcccaagagg agctagaagt 2100
 cattgccact caccctgcca gagaccactc cttctttgtg gacgagtttg 2150
 acaacttcca tcagtatgtc ccaggatca tccagaacat ttgtacagag 2200
 ttcaactcac agcctcggaa ctgaattcag agcaggcaga gcaccagcaa 2250
 gtgctgcttt actaactgac gtgttgacc accccaccgc ttaatggggc 2300
 acgcacgggt catcaagtct tgggcagggc atggagaaac aaatgtcttg 2350

Sequence Listing - P3230R1C1.txt

ttattattct ttgcatcat gcttttcat attccaaac ttggagtac 2400
 aaagatgac acaaacgtat agaatgagcc aaaaggctac atcatgttga 2450
 ggggtgctga gattttacat ttgacaatt gttttcaaa taaatgttcg 2500
 gaatacagtg cagcccttac gacaggctta cgtagagctt ttgtgagatt 2550
 ttaagtgtt tatttctgat ttgaactctg taaccttcag caagtttcat 2600
 tttgtcatg acaatgtagg aattgctgaa ttaaatgttt agaaggatga 2650
 aaaaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa 2700
 aaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa 2750
 aaaaaaaaa aaaaaaaaa aag 2773

<210> 34

<211> 678

<212> PRT

<213> Homo Sapien

<400> 34

Met Arg Thr Val Val Leu Thr Met Lys Ala Ser Val Ile Glu Met
 1 5 10 15

Phe Leu Val Leu Leu Val Thr Gly Val His Ser Asn Lys Glu Thr
 20 25 30

Ala Lys Lys Ile Lys Arg Pro Lys Phe Thr Val Pro Gln Ile Asn
 35 40 45

Cys Asp Val Lys Ala Gly Lys Ile Ile Asp Pro Glu Phe Ile Val
 50 55 60

Lys Cys Pro Ala Gly Cys Gln Asp Pro Lys Tyr His Val Tyr Gly
 65 70 75

Thr Asp Val Tyr Ala Ser Tyr Ser Ser Val Cys Gly Ala Ala Val
 80 85 90

His Ser Gly Val Leu Asp Asn Ser Gly Gly Lys Ile Leu Val Arg
 95 100 105

Lys Val Ala Gly Gln Ser Gly Tyr Lys Gly Ser Tyr Ser Asn Gly
 110 115 120

Val Gln Ser Leu Ser Leu Pro Arg Trp Arg Glu Ser Phe Ile Val
 125 130 135

Leu Glu Ser Lys Pro Lys Lys Gly Val Thr Tyr Pro Ser Ala Leu
 140 145 150

Thr Tyr Ser Ser Ser Lys Ser Pro Ala Ala Gln Ala Gly Glu Thr

Sequence Listing - P3230R1C1.txt

155	160	165
Thr Lys Ala Tyr Gln Arg Pro Pro Ile Pro Gly Thr Thr Ala Gln		
170	175	180
Pro Val Thr Leu Met Gln Leu Leu Ala Val Thr Val Ala Val Ala		
185	190	195
Thr Pro Thr Thr Leu Pro Arg Pro Ser Pro Ser Ala Ala Ser Thr		
200	205	210
Thr Ser Ile Pro Arg Pro Gln Ser Val Gly His Arg Ser Gln Glu		
215	220	225
Met Asp Leu Trp Ser Thr Ala Thr Tyr Thr Ser Ser Gln Asn Arg		
230	235	240
Pro Arg Ala Asp Pro Gly Ile Gln Arg Gln Asp Pro Ser Gly Ala		
245	250	255
Ala Phe Gln Lys Pro Val Gly Ala Asp Val Ser Leu Gly Leu Val		
260	265	270
Pro Lys Glu Glu Leu Ser Thr Gln Ser Leu Glu Pro Val Ser Leu		
275	280	285
Gly Asp Pro Asn Cys Lys Ile Asp Leu Ser Phe Leu Ile Asp Gly		
290	295	300
Ser Thr Ser Ile Gly Lys Arg Arg Phe Arg Ile Gln Lys Gln Leu		
305	310	315
Leu Ala Asp Val Ala Gln Ala Leu Asp Ile Gly Pro Ala Gly Pro		
320	325	330
Leu Met Gly Val Val Gln Tyr Gly Asp Asn Pro Ala Thr His Phe		
335	340	345
Asn Leu Lys Thr His Thr Asn Ser Arg Asp Leu Lys Thr Ala Ile		
350	355	360
Glu Lys Ile Thr Gln Arg Gly Gly Leu Ser Asn Val Gly Arg Ala		
365	370	375
Ile Ser Phe Val Thr Lys Asn Phe Phe Ser Lys Ala Asn Gly Asn		
380	385	390
Arg Ser Gly Ala Pro Asn Val Val Val Val Met Val Asp Gly Trp		
395	400	405
Pro Thr Asp Lys Val Glu Glu Ala Ser Arg Leu Ala Arg Glu Ser		
410	415	420
Gly Ile Asn Ile Phe Phe Ile Thr Ile Glu Gly Ala Ala Glu Asn		
425	430	435

Sequence Listing - P3230R1C1.txt

Glu Lys Gln Tyr Val Val Glu Pro Asn Phe Ala Asn Lys Ala Val
 440 445 450
 Cys Arg Thr Asn Gly Phe Tyr Ser Leu His Val Gln Ser Trp Phe
 455 460 465
 Gly Leu His Lys Thr Leu Gln Pro Leu Val Lys Arg Val Cys Asp
 470 475 480
 Thr Asp Arg Leu Ala Cys Ser Lys Thr Cys Leu Asn Ser Ala Asp
 485 490 495
 Ile Gly Phe Val Ile Asp Gly Ser Ser Ser Val Gly Thr Gly Asn
 500 505 510
 Phe Arg Thr Val Leu Gln Phe Val Thr Asn Leu Thr Lys Glu Phe
 515 520 525
 Glu Ile Ser Asp Thr Asp Thr Arg Ile Gly Ala Val Gln Tyr Thr
 530 535 540
 Tyr Glu Gln Arg Leu Glu Phe Gly Phe Asp Lys Tyr Ser Ser Lys
 545 550 555
 Pro Asp Ile Leu Asn Ala Ile Lys Arg Val Gly Tyr Trp Ser Gly
 560 565 570
 Gly Thr Ser Thr Gly Ala Ala Ile Asn Phe Ala Leu Glu Gln Leu
 575 580 585
 Phe Lys Lys Ser Lys Pro Asn Lys Arg Lys Leu Met Ile Leu Ile
 590 595 600
 Thr Asp Gly Arg Ser Tyr Asp Asp Val Arg Ile Pro Ala Met Ala
 605 610 615
 Ala His Leu Lys Gly Val Ile Thr Tyr Ala Ile Gly Val Ala Trp
 620 625 630
 Ala Ala Gln Glu Glu Leu Glu Val Ile Ala Thr His Pro Ala Arg
 635 640 645
 Asp His Ser Phe Phe Val Asp Glu Phe Asp Asn Leu His Gln Tyr
 650 655 660
 Val Pro Arg Ile Ile Gln Asn Ile Cys Thr Glu Phe Asn Ser Gln
 665 670 675
 Pro Arg Asn

<210> 35
 <211> 2095
 <212> DNA

<213> Homo Sapien

<400> 35
 ccgagcacag gagattgcct gcgttttagga ggtggctgcg ttgtgggaaa 50
 agctatcaag gaagaaattg ccaaacatg tcttttttc tgttttcaga 100
 gtatgtcaca acagatctga gtgttttaat taagcatgga atacagaaaa 150
 caacaaaaaa ctaagcttt aatttcacat ggaattccac agttttctta 200
 gtcctctgga cccggttgac ctgttggtc tcctcgctgg ctgctctatc 250
 acgtggtgct ctccgactac tcaccccgag tgtaagaac cttegggtcg 300
 cgtgctctg agctgctgtg gatggctcg gctctctgga ctgtcttcc 350
 gagtaggatg tctactgagat cctcctaatg gagctctctg ctgctgtcac 400
 tctgagttt ctttgtgatg tggtagctca gccttccca ctacaatgtg 450
 atagaacgcg tgaactggat gtactctat gagtatgagc cgatttacag 500
 acaagacttt cacttcacac ttcgagagca ttcaactgc tctcatcaa 550
 atccatttct ggctattctg gtgacctccc acccttcaga tgtgaagcc 600
 aggaggcca ttagagttac ttgggggtgaa aaaaagtctt ggtggggata 650
 tgaggttctt acattttct tattaggcca agaggctgaa aaggaagaca 700
 aaatgttggc attgtccta gaggatgaac accttctta tggtagacata 750
 atccgacaag attttttaga cacatataat aacctgacct tgaaaacct 800
 tatggcattc aggtgggtaa ctgagttttg ccccaatgcc aagtacgtaa 850
 tgaagacaga cactgatgtt tcatcaata ctggcaattt agtgaagat 900
 cttttaaac taaaccactc agagaagttt ttcacaggtt atcctcta 950
 tgataattat tcctatagag gattttacca aaaaacctat atttcttacc 1000
 aggagtatcc ttcaagggtg ttccctccat actgcagtgg gttggggtat 1050
 ataattgcca gagatttggg gccaggatc tatgaaatga tgggtcacgt 1100
 aaaaccatc aagtgtgaag atgtttatgt cgggatctgt ttgaattat 1150
 taaaagtga cattcatatt ccagaagaca caaatctttt ctttctatat 1200
 agaatccatt tggatgtctg tcaactgaga cgtgtgattg cagcccatg 1250
 ctttcttcc aaggagatca tcacttttg gcaggtcatg ctaaggaaca 1300

Sequence Listing - P3230R1C1.txt

ccacatgccca ttattaactt cacattctac aaaaagccta gaaggacagg 1350
 ataccttggt gaaagtgtta aataaagtag gtactgtgga aaattcatgg 1400
 ggaggctcagt gtgctggcct acactgaact gaaactcatg aaaaaccagg 1450
 actggagact ggaggggttac acttggtgatt tattagtcag gcccttcaaa 1500
 gatgatatgt ggaggaatta aatataaagg aattggaggt ttttgctaaa 1550
 gaaattaata ggaccaaca atttggacat gtcattctgt agactagaat 1600
 ttcttaaaag ggtgttactg agttataagc tcactaggct gtaaaacaa 1650
 aacaatgtag agttttattt attgaacaat gtatgcactt gaagggtttg 1700
 tgtatatctt atgtggatta ccaatttaaa aatatatgta gttctgtgtc 1750
 aaaaaacttc ttactgaag ttatactgaa caaaatttta cctgtttttg 1800
 gtcatttata aagtacttca agatgttgca gtatttcaca gttattatta 1850
 tttaaaatta cttcaacttt gtgtttttaa atgttttgac gatttcaata 1900
 caagataaaa aggatagatga atcattcttt acatgcaaac attttccagt 1950
 tacttaactg atcagtttat tattgataca tcactccatt aatgtaaagt 2000
 catagggtcat tattgcatat cagtaatctc ttggactttg ttaaatattt 2050
 tactgtggta atatagagaa gaattaaagc aagaaaatct gaaaa 2095

<210> 36

<211> 331

<212> PRT

<213> Homo Sapien

<400> 36

Met Ala Ser Ala Leu Trp Thr Val Leu Pro Ser Arg Met Ser Leu
 1 5 10 15

Arg Ser Leu Lys Trp Ser Leu Leu Leu Ser Leu Leu Ser Phe
 20 25 30

Phe Val Met Trp Tyr Leu Ser Leu Pro His Tyr Asn Val Ile Glu
 35 40 45

Arg Val Asn Trp Met Tyr Phe Tyr Glu Tyr Glu Pro Ile Tyr Arg
 50 55 60

Gln Asp Phe His Phe Thr Leu Arg Glu His Ser Asn Cys Ser His
 65 70 75

Gln Asn Pro Phe Leu Val Ile Leu Val Thr Ser His Pro Ser Asp
 80 85 90

Sequence Listing - P3230R1C1.txt

Val Lys Ala Arg Gln Ala Ile Arg Val Thr Trp Gly Glu Lys Lys
 95 100 105

Ser Trp Trp Gly Tyr Glu Val Leu Thr Phe Phe Leu Leu Gly Gln
 110 115 120

Glu Ala Glu Lys Glu Asp Lys Met Leu Ala Leu Ser Leu Glu Asp
 125 130 135

Glu His Leu Leu Tyr Gly Asp Ile Ile Arg Gln Asp Phe Leu Asp
 140 145 150

Thr Tyr Asn Asn Leu Thr Leu Lys Thr Ile Met Ala Phe Arg Trp
 155 160 165

Val Thr Glu Phe Cys Pro Asn Ala Lys Tyr Val Met Lys Thr Asp
 170 175 180

Thr Asp Val Phe Ile Asn Thr Gly Asn Leu Val Lys Tyr Leu Leu
 185 190 195

Asn Leu Asn His Ser Glu Lys Phe Phe Thr Gly Tyr Pro Leu Ile
 200 205 210

Asp Asn Tyr Ser Tyr Arg Gly Phe Tyr Gln Lys Thr His Ile Ser
 215 220 225

Tyr Gln Glu Tyr Pro Phe Lys Val Phe Pro Pro Tyr Cys Ser Gly
 230 235 240

Leu Gly Tyr Ile Met Ser Arg Asp Leu Val Pro Arg Ile Tyr Glu
 245 250 255

Met Met Gly His Val Lys Pro Ile Lys Phe Glu Asp Val Tyr Val
 260 265 270

Gly Ile Cys Leu Asn Leu Leu Lys Val Asn Ile His Ile Pro Glu
 275 280 285

Asp Thr Asn Leu Phe Phe Leu Tyr Arg Ile His Leu Asp Val Cys
 290 295 300

Gln Leu Arg Arg Val Ile Ala Ala His Gly Phe Ser Ser Lys Glu
 305 310 315

Ile Ile Thr Phe Trp Gln Val Met Leu Arg Asn Thr Thr Cys His
 320 325 330

Tyr

<210> 37
 <211> 2846
 <212> DNA

<213> Homo Sapien

<400> 37

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 tggggctcac ttttctcag ctctcttca tctcgtcctt gccaaagagag 100
 tacacagtca ttaatgaagc ctgccctgga gcagagtgga atatcatgtg 150
 tcgggagtgct tgtgaatatg atcagattga gtgcgtctgc cccggaaaga 200
 ggggaagtcgt ggggtatacc atcccttgct gcaggaatga ggagaatgag 250
 tgtgactcct gcctgatcca ccaggttgt accatctttg aaaactgcaa 300
 gagctgccga aatggctcat ggggggggtac ctggatgac ttctatgtga 350
 aggggttcta ctgtgcagag tgccgagcag cctgggtacgg aggagactgc 400
 atgcgatgtg gccaggttct gcgagcccca aagggtcaga tttgttgga 450
 aagctatccc ctaaatgctc actgtgaatg gaccattcat gctaaacctg 500
 ggtttgtcat ccaactaaga ttgtcatgt tgagtctgga gtttgactac 550
 atgtgccagt atgactatgt tgaggttcgt gatggagaca accgcgatgg 600
 ccagatcatc aagcgtgtct gtggcaacga gcggccagct cctatcaga 650
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 aataacaggg ggccttgggc ttatcaacgg acgcatgtct aaaattggca 950
 ccgtggtgtc tttctttgtt aacaactcct atgttcttag tggcaatgag 1000
 aaaagaactt gccagcagaa tggagagtgg tcagggaaac agcccatctg 1050
 cataaaagcc tgccgagaac caaagatttc agacctggtg agaaggagag 1100
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 tcagcggcct tcagcaagca gaaactgcag agtgcacctt ccaagaagcc 1200
 agcccttccc ttggagatc tgcccatggg ataccaacat ctgcataccc 1250
 agctccagta tgagtgcac tcaccttctt accgccgcct gggcagcagc 1300

Sequence Listing - P3230R1C1.txt

aggaggacat gtctgaggac tgggaagtgg agtgggaggg caccatctg 1350
catccctatc tgcgggaaaa ttgagaacat cactgtctca aagaccaag 1400
ggttgcgctg gccgtggcag gcagccatct acaggaggac cagcggggtg 1450
catgacggca gcctacacaa gggagcgtgg ttctagtct gcagcgtgc 1500
cttgtgaat gagcgactg tgggtgtggc tgcccactgt gttactgacc 1550
tggggaaggt caccatgatc aagacagcag acctgaaagt tgtttgggg 1600
aaattctacc gggatgatga ccgggatgag aagaccatcc agagcctaca 1650
gatttctgct atcattctgc atcccaacta tgaccctac ctgcttgatg 1700
ctgacatcgc catctgaag ctctagaca aggccgtat cagcaccga 1750
gtccagccca tctgctcgc tgccagtgg gatctagca cttcttcca 1800
ggagtccac atcactgtgg ctggctggaa tgtcctggca gacgtgagga 1850
gccctggctt caagaacgac acactgcgct ctgggggtgt cagtgtggtg 1900
gactcgtcgc tgtgtgagga gcagcatgag gaccatggca tccagtggag 1950
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atatctgcac tgcagagaca ggaggcatcg cggctgtgtc ctcccgga 2050
cgagcatctc ctgagccacg ctggcatctg atgggactgg tcagctggag 2100
ctatgataaa acatgcagcc acaggctctc cactgccttc accaagggtc 2150
tgcttttaa agactggatt gaaagaaata tgaaatgaac catgctcatg 2200
cactcctga gaagtgttc tgtataccg tctgtacgtg tgctattgcg 2250
tgaagcagtg tgggcctgaa gtgtgatttg gctgtgaac ttgctgtgc 2300
cagggcttct gacttcaggg acaaaaactca gtgaagggtg agtagacctc 2350
cattgtggtt aggctgatgc cgcgtccact actaggacag ccaattggaa 2400
gatgccaggg cttgcaagaa gtaagtttct tcaaagaaga ccatatacaa 2450
aaccttcca ctccactgac ctggtgtgtc tcccaactc tcagttatac 2500
gaatgccatc agctgacca ggaagatct gggcttcagt aggcccttt 2550
tgaggctctc aagttctaga gagctgcctg tgggacagcc cagggcagca 2600
gagctgggat gtggtgcatg cttttgtgta catggccaca gtacagtctg 2650
gtccttttc tcccatctc cttgtacaca ttttaataaa ataagggttg 2700

Sequence Listing - P3230R1C1.txt

gcttctgaac tacaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2750

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2800

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 2846

<210> 38

<211> 720

<212> PRT

<213> Homo Sapien

<400> 38

Met Glu Leu Gly Cys Trp Thr Gln Leu Gly Leu Thr Phe Leu Gln
1 5 10 15

Leu Leu Leu Ile Ser Ser Leu Pro Arg Glu Tyr Thr Val Ile Asn
20 25 30

Glu Ala Cys Pro Gly Ala Glu Trp Asn Ile Met Cys Arg Glu Cys
35 40 45

Cys Glu Tyr Asp Gln Ile Glu Cys Val Cys Pro Gly Lys Arg Glu
50 55 60

Val Val Gly Tyr Thr Ile Pro Cys Cys Arg Asn Glu Glu Asn Glu
65 70 75

Cys Asp Ser Cys Leu Ile His Pro Gly Cys Thr Ile Phe Glu Asn
80 85 90

Cys Lys Ser Cys Arg Asn Gly Ser Trp Gly Gly Thr Leu Asp Asp
95 100 105

Phe Tyr Val Lys Gly Phe Tyr Cys Ala Glu Cys Arg Ala Gly Trp
110 115 120

Tyr Gly Gly Asp Cys Met Arg Cys Gly Gln Val Leu Arg Ala Pro
125 130 135

Lys Gly Gln Ile Leu Leu Glu Ser Tyr Pro Leu Asn Ala His Cys
140 145 150

Glu Trp Thr Ile His Ala Lys Pro Gly Phe Val Ile Gln Leu Arg
155 160 165

Phe Val Met Leu Ser Leu Glu Phe Asp Tyr Met Cys Gln Tyr Asp
170 175 180

Tyr Val Glu Val Arg Asp Gly Asp Asn Arg Asp Gly Gln Ile Ile
185 190 195

Lys Arg Val Cys Gly Asn Glu Arg Pro Ala Pro Ile Gln Ser Ile
200 205 210

Gly Ser Ser Leu His Val Leu Phe His Ser Asp Gly Ser Lys Asn
215 220 225

Sequence Listing - P3230R1C1.txt

Phe Asp Gly Phe His Ala Ile Tyr Glu Glu Ile Thr Ala Cys Ser
 230 235 240
 Ser Ser Pro Cys Phe His Asn Gly Thr Cys Val Leu Asp Lys Ala
 245 250 255
 Gly Ser Tyr Lys Cys Ala Cys Leu Ala Gly Tyr Thr Gly Gln Arg
 260 265 270
 Cys Glu Asn Leu Leu Glu Glu Arg Asn Cys Ser Asp Pro Gly Gly
 275 280 285
 Pro Val Asn Gly Tyr Gln Lys Ile Thr Gly Gly Pro Gly Leu Ile
 290 295 300
 Asn Gly Arg His Ala Lys Ile Gly Thr Val Val Ser Phe Phe Cys
 305 310 315
 Asn Asn Ser Tyr Val Leu Ser Gly Asn Glu Lys Arg Thr Cys Gln
 320 325 330
 Gln Asn Gly Glu Trp Ser Gly Lys Gln Pro Ile Cys Ile Lys Ala
 335 340 345
 Cys Arg Glu Pro Lys Ile Ser Asp Leu Val Arg Arg Arg Val Leu
 350 355 360
 Pro Met Gln Val Gln Ser Arg Glu Thr Pro Leu His Gln Leu Tyr
 365 370 375
 Ser Ala Ala Phe Ser Lys Gln Lys Leu Gln Ser Ala Pro Thr Lys
 380 385 390
 Lys Pro Ala Leu Pro Phe Gly Asp Leu Pro Met Gly Tyr Gln His
 395 400 405
 Leu His Thr Gln Leu Gln Tyr Glu Cys Ile Ser Pro Phe Tyr Arg
 410 415 420
 Arg Leu Gly Ser Ser Arg Arg Thr Cys Leu Arg Thr Gly Lys Trp
 425 430 435
 Ser Gly Arg Ala Pro Ser Cys Ile Pro Ile Cys Gly Lys Ile Glu
 440 445 450
 Asn Ile Thr Ala Pro Lys Thr Gln Gly Leu Arg Trp Pro Trp Gln
 455 460 465
 Ala Ala Ile Tyr Arg Arg Thr Ser Gly Val His Asp Gly Ser Leu
 470 475 480
 His Lys Gly Ala Trp Phe Leu Val Cys Ser Gly Ala Leu Val Asn
 485 490 495
 Glu Arg Thr Val Val Val Ala Ala His Cys Val Thr Asp Leu Gly

Sequence Listing - P3230R1C1.txt

500	505	510
Lys Val Thr Met Ile Lys Thr Ala Asp Leu Lys Val Val Leu Gly		
515	520	525
Lys Phe Tyr Arg Asp Asp Asp Arg Asp Glu Lys Thr Ile Gln Ser		
530	535	540
Leu Gln Ile Ser Ala Ile Ile Leu His Pro Asn Tyr Asp Pro Ile		
545	550	555
Leu Leu Asp Ala Asp Ile Ala Ile Leu Lys Leu Leu Asp Lys Ala		
560	565	570
Arg Ile Ser Thr Arg Val Gln Pro Ile Cys Leu Ala Ala Ser Arg		
575	580	585
Asp Leu Ser Thr Ser Phe Gln Glu Ser His Ile Thr Val Ala Gly		
590	595	600
Trp Asn Val Leu Ala Asp Val Arg Ser Pro Gly Phe Lys Asn Asp		
605	610	615
Thr Leu Arg Ser Gly Val Val Ser Val Val Asp Ser Leu Leu Cys		
620	625	630
Glu Glu Gln His Glu Asp His Gly Ile Pro Val Ser Val Thr Asp		
635	640	645
Asn Met Phe Cys Ala Ser Trp Glu Pro Thr Ala Pro Ser Asp Ile		
650	655	660
Cys Thr Ala Glu Thr Gly Gly Ile Ala Ala Val Ser Phe Pro Gly		
665	670	675
Arg Ala Ser Pro Glu Pro Arg Trp His Leu Met Gly Leu Val Ser		
680	685	690
Trp Ser Tyr Asp Lys Thr Cys Ser His Arg Leu Ser Thr Ala Phe		
695	700	705
Thr Lys Val Leu Pro Phe Lys Asp Trp Ile Glu Arg Asn Met Lys		
710	715	720

<210> 39

<211> 2571

<212> DNA

<213> Homo Sapien

<400> 39

gggtctctaca tctctcatc tgagaatcag agagcataat cttcttacgg 50

gcccgtgatt tattaacgtg gcttaatctg aaggttctca gtcaaattct 100

ttgtgatcta ctgattgtgg ggccatggca aggtttgctt aaaggagctt 150

Sequence Listing - P3230R1C1.txt

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 cacactgctc ggagaatgaa ggcgcttctg ttgctggctc tgccttggtt 250
 cagtctgctc aactacattg acaatgtggg caactgcac ttctgtatt 300
 cagaactctg taaagggtgcc tccactacg gcctgaccaa agataggaag 350
 aggcgctcac aagatggctg tccagacggc tgtgcgagcc tcacagccac 400
 ggtccctccc ccagagggtt ctgcagctgc caccatctcc ttaatgacag 450
 acgagcctgg cctagacaac cctgcctacg tgcctcggc agaggacggg 500
 cagccagcaa tcagcccagt ggactctggc cggagcaacc gaactagggc 550
 acggcccttt gagagatcca ctattagaag cagatcattt aaaaaataa 600
 atcgagcttt gagtgttctt cgaaggacaa agagcgggag tgcagttgcc 650
 aaccatgccg accagggcag ggaaaattct gaaaacacca ctgcccctga 700
 agtctttcca aggttgtagc acctgattcc agatggtgaa attaccagca 750
 tcaagatcaa tcgagtagat ccagtgaaa gcctctctat taggctggtg 800
 ggaggtagcg aaacccact ggtccatc acattatcg 850
 tgatgggggt atcgccagag acggccggct actgccagga gacatcttc 900
 taaaggtaaa cgggatggac atcagcaatg tccctacaa ctacgtgtg 950
 cgtcctctgc ggcagccctg ccagggtgct tggctgactg tgatgcgtga 1000
 acagaagttc cgcagcagga acaatggaca ggccccggat gcctacagac 1050
 cccgagatga cagctttcat gtgattctca aaaaagtag ccccgaggag 1100
 cagcttgtaa taaaactggt gcgcaagggt gatgagcctg gggttttcat 1150
 ctcaatgtg ctggatggcg gtgtggcata tcgacatggt cagcttgagg 1200
 agaatgaccg tgtgttagcc atcaatggac atgatcttcg atatggcagc 1250
 ccagaaagtg cggctcatct gattcaggcc agtgaaagac gtgttcacct 1300
 cgtcgtgtcc cgccagggtc ggcagcggag ccctgacatc tttaggaag 1350
 ccggcttgaa cagcaatggc agctggtccc cagggccagg ggagaggagc 1400
 aacactccca agcccccca tctacaatt actgtcatg agaagggtgt 1450
 aaatatccaa aaagaccccg gtgaatctct cggcatgacc gtcgcagggg 1500

Sequence Listing - P3230R1C1.txt

gagcatcaca tagagaatgg gatttgcccta tctatgtcat cagtgttgag 1550
 cccggaggag tcataagcag agatggaaga ataaaaacag gtgacatttt 1600
 gtgtaatgtg gatggggctg aactgacaga ggtcagccgg agtgaggcag 1650
 tggcattatt gaaaagaaca tcactctcga tagtactcaa agctttggaa 1700
 gtcaagagat atgagcccca ggaagactgc agcagcccg cagccctgga 1750
 ctccaaccac aacatggccc caccagtgga ctgggtccca tcctgggtca 1800
 tgtggctgga attaccacgg tgcttgata actgtaaaga tattgtatta 1850
 cgaagaaaca cagctggaag tctgggcttc tgcattgtag gaggttatga 1900
 agaatacaat ggaacaaac ctttttcat caaatccatt gttgaaggaa 1950
 caccagcata caatgatgga agaattagat gtggtgatat tcttctgtct 2000
 gtcaatggta gaagtacatc aggaatgata catgcttgct tggcaagact 2050
 gctgaaagaa cttaaaggaa gaattactct aactattggt tcttggcctg 2100
 gcactttttt atagaatcaa tgatgggtca gaggaaaaca gaaaaatcac 2150
 aataggcta agaagtgaa acactatatt tatctgtca gtttttata 2200
 ttaaagaaag aatacattgt aaaaatgtca ggaaaagtat gatcatctaa 2250
 tgaaagccag ttacacctca gaaaatatga ttccaaaaa attaaacta 2300
 ctagtttttt tcagtggtgg aggatttctc attactctac aacattgttt 2350
 atattttttt tattcaataa aaagccctaa aacaactaaa atgattgatt 2400
 tgtatacccc actgaattca agctgattta aatttaaaat ttggtatatg 2450
 ctgaagtctg ccaagggtac attatggcca tttttaattt acagctaaaa 2500
 tattttttaa aatgcattgc tgagaaacgt tgctttcatc aaacaagaat 2550
 aaatattttt cagaagttaa a 2571

<210> 40

<211> 632

<212> PRT

<213> Homo Sapien

<400> 40

Met	Lys	Ala	Leu	Leu	Leu	Leu	Val	Leu	Pro	Trp	Leu	Ser	Pro	Ala
1			5				10			15				

Asn	Tyr	Ile	Asp	Asn	Val	Gly	Asn	Leu	His	Phe	Leu	Tyr	Ser	Glu
			20			25			30					

Sequence Listing - P3230R1C1.txt

Leu Cys Lys Gly Ala Ser His Tyr Gly Leu Thr Lys Asp Arg Lys
 35 40 45
 Arg Arg Ser Gln Asp Gly Cys Pro Asp Gly Cys Ala Ser Leu Thr
 50 55 60
 Ala Thr Ala Pro Ser Pro Glu Val Ser Ala Ala Ala Thr Ile Ser
 65 70 75
 Leu Met Thr Asp Glu Pro Gly Leu Asp Asn Pro Ala Tyr Val Ser
 80 85 90
 Ser Ala Glu Asp Gly Gln Pro Ala Ile Ser Pro Val Asp Ser Gly
 95 100 105
 Arg Ser Asn Arg Thr Arg Ala Arg Pro Phe Glu Arg Ser Thr Ile
 110 115 120
 Arg Ser Arg Ser Phe Lys Lys Ile Asn Arg Ala Leu Ser Val Leu
 125 130 135
 Arg Arg Thr Lys Ser Gly Ser Ala Val Ala Asn His Ala Asp Gln
 140 145 150
 Gly Arg Glu Asn Ser Glu Asn Thr Thr Ala Pro Glu Val Phe Pro
 155 160 165
 Arg Leu Tyr His Leu Ile Pro Asp Gly Glu Ile Thr Ser Ile Lys
 170 175 180
 Ile Asn Arg Val Asp Pro Ser Glu Ser Leu Ser Ile Arg Leu Val
 185 190 195
 Gly Gly Ser Glu Thr Pro Leu Val His Ile Ile Ile Gln His Ile
 200 205 210
 Tyr Arg Asp Gly Val Ile Ala Arg Asp Gly Arg Leu Leu Pro Gly
 215 220 225
 Asp Ile Ile Leu Lys Val Asn Gly Met Asp Ile Ser Asn Val Pro
 230 235 240
 His Asn Tyr Ala Val Arg Leu Leu Arg Gln Pro Cys Gln Val Leu
 245 250 255
 Trp Leu Thr Val Met Arg Glu Gln Lys Phe Arg Ser Arg Asn Asn
 260 265 270
 Gly Gln Ala Pro Asp Ala Tyr Arg Pro Arg Asp Asp Ser Phe His
 275 280 285
 Val Ile Leu Asn Lys Ser Ser Pro Glu Glu Gln Leu Gly Ile Lys
 290 295 300

Sequence Listing - P3230R1C1.txt

Leu Val Arg Lys Val Asp Glu Pro Gly Val Phe Ile Phe Asn Val
 305 310 315
 Leu Asp Gly Gly Val Ala Tyr Arg His Gly Gln Leu Glu Glu Asn
 320 325 330
 Asp Arg Val Leu Ala Ile Asn Gly His Asp Leu Arg Tyr Gly Ser
 335 340 345
 Pro Glu Ser Ala Ala His Leu Ile Gln Ala Ser Glu Arg Arg Val
 350 355 360
 His Leu Val Val Ser Arg Gln Val Arg Gln Arg Ser Pro Asp Ile
 365 370 375
 Phe Gln Glu Ala Gly Trp Asn Ser Asn Gly Ser Trp Ser Pro Gly
 380 385 390
 Pro Gly Glu Arg Ser Asn Thr Pro Lys Pro Leu His Pro Thr Ile
 395 400 405
 Thr Cys His Glu Lys Val Val Asn Ile Gln Lys Asp Pro Gly Glu
 410 415 420
 Ser Leu Gly Met Thr Val Ala Gly Gly Ala Ser His Arg Glu Trp
 425 430 435
 Asp Leu Pro Ile Tyr Val Ile Ser Val Glu Pro Gly Val Ile
 440 445 450
 Ser Arg Asp Gly Arg Ile Lys Thr Gly Asp Ile Leu Leu Asn Val
 455 460 465
 Asp Gly Val Glu Leu Thr Glu Val Ser Arg Ser Glu Ala Val Ala
 470 475 480
 Leu Leu Lys Arg Thr Ser Ser Ser Ile Val Leu Lys Ala Leu Glu
 485 490 495
 Val Lys Glu Tyr Glu Pro Gln Glu Asp Cys Ser Ser Pro Ala Ala
 500 505 510
 Leu Asp Ser Asn His Asn Met Ala Pro Pro Ser Asp Trp Ser Pro
 515 520 525
 Ser Trp Val Met Trp Leu Glu Leu Pro Arg Cys Leu Tyr Asn Cys
 530 535 540
 Lys Asp Ile Val Leu Arg Arg Asn Thr Ala Gly Ser Leu Gly Phe
 545 550 555
 Cys Ile Val Gly Gly Tyr Glu Glu Tyr Asn Gly Asn Lys Pro Phe
 560 565 570
 Phe Ile Lys Ser Ile Val Glu Gly Thr Pro Ala Tyr Asn Asp Gly

Sequence Listing - P3230R1C1.txt

575 580 585

Arg Ile Arg Cys Gly Asp Ile Leu Leu Ala Val Asn Gly Arg Ser
590 595 600

Thr Ser Gly Met Ile His Ala Cys Leu Ala Arg Leu Leu Lys Glu
605 610 615

Leu Lys Gly Arg Ile Thr Leu Thr Ile Val Ser Trp Pro Gly Thr
620 625 630

Phe Leu

<210> 41

<211> 1964

<212> DNA

<213> Homo Sapien

<400> 41

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agctcaactt gaagctttct tgctgcagtg gaagcagaga gatagatatt 100
attcacgtaa taaaaaacat gggcttcaac ctgactttcc accttctcta 150
caaattccga ttactgttgc tgttgacttt gtgcctgaca gtggttgggt 200
gggccaccag taactacttc gtgggtgcca ttcaagagat tcctaaagca 250
aaggagtcca tggctaattt ccataagacc ctcatcttgg ggaagggaaa 300
aactctgact aatgaagcat ccacgaagaa ggtagaactt gacaactgtc 350
cttctgtgtc tccttacctc agaggccaga gcaagctcat ttccaacca 400
gatctcactt tggaagaggt acaggcagaa aatcccaaag tgtccagagg 450
ccggtatcgc cctcaggaat gtaaagcttt acagagggtc gccatctctg 500
ttccccaccg gaacagagag aaacacctga tgtacctgct ggaacatctg 550
catcccttcc tgcaaggca gcagctggat tatggcatct acgtcatcca 600
ccaggctgaa ggtaaaaagt ttaatcgagc caaactcttg aatgtgggct 650
atctagaagc cctcaaggaa gaaaattggg actgctttat attccacgat 700
gtggacctgg tacccgagaa tgactttaac ctttacaagt gtgaggagca 750
tccaagcat ctggtggttg gcaggaacag cactgggtac aggttacgtt 800
acagtggata ttttgggggt gttactgcc taagcagaga gcagtttttc 850
aagggtaatg gattctctaa caactactgg ggaatggggag gcgaagacga 900

Sequence Listing - P3230R1C1.txt

tgacctcaga ctcaggggtg agctccaaag aatgaaaatt tcccgcccc 950
 tgcctgaagt gggtaaatat acaatggtct tccacactag agacaaagcg 1000
 aatgagggtga acgcagaacg gatgaagctc ttacaccaag tgtcacgagt 1050
 ctggagaaca gatgggttga gtagtgttc ttataaata gtatctgtgg 1100
 aacacaaatcc ttatatatc aacatcacag tggatttctg gtttgggtga 1150
 tgacctgga tcttttggtg atgtttggaa gaactgattc tttgttga 1200
 ataattttgg cctagagact tcaaatagta gcacacatta agaactgtt 1250
 acagctcatt gttgagctga attttctct tttgtattt cttagcagag 1300
 ctctggtga ttagagatg aaaacagttg taacaagaca gctttcttag 1350
 tcatcttgat catgaggggtt aaatattgta atatggatac ttgaaggact 1400
 ttatataaaa ggatgactca aaggataaaa tgaacgctat ttgaggactc 1450
 tgggtgaagg agatttattt aaatttgaag taatatatta tgggataaaa 1500
 ggccacagga aataagactg ctgaatgtct gagagaacca gagttgtct 1550
 cgtccaaggt agaaaggtag gaagatacaa tactgttatt catttatcct 1600
 gtacaatcat ctgtgaagtg gtggtgtcag gtgagaaggc gtccacaaaa 1650
 gaggggagaa aagcgacga atcaggacac agtgaacttg ggaatgaaga 1700
 ggtagcagga ggggtgagtg tcggctgcaa aggcagcagt agctgagctg 1750
 gttgcagggt ctgatagcct tcaggggagg acctgccag gtatgccttc 1800
 cagtgtatgcc caccagagaa tacattctct attagttttt aaagagtttt 1850
 tgtaaaatga tttgtacaa gtaggatatg aattagcagt ttacaagttt 1900
 acatatatac taataataaa tatgtctatc aaatacctct gtagtaaaat 1950
 gtgaaaaagc aaaa 1964

<210> 42

<211> 344

<212> PRT

<213> Homo Sapien

<400> 42

Met	Gly	Phe	Asn	Leu	Thr	Phe	His	Leu	Ser	Tyr	Lys	Phe	Arg	Leu
1			5			10				15				
Leu	Leu	Leu	Leu	Thr	Leu	Cys	Leu	Thr	Val	Val	Gly	Trp	Ala	Thr
			20			25			30					

Sequence Listing - P3230R1C1.txt

Ser Asn Tyr Phe Val Gly Ala Ile Gln Glu Ile Pro Lys Ala Lys
35 40 45

Glu Phe Met Ala Asn Phe His Lys Thr Leu Ile Leu Gly Lys Gly
50 55 60

Lys Thr Leu Thr Asn Glu Ala Ser Thr Lys Lys Val Glu Leu Asp
65 70 75

Asn Cys Pro Ser Val Ser Pro Tyr Leu Arg Gly Gln Ser Lys Leu
80 85 90

Ile Phe Lys Pro Asp Leu Thr Leu Glu Glu Val Gln Ala Glu Asn
95 100 105

Pro Lys Val Ser Arg Gly Arg Tyr Arg Pro Gln Glu Cys Lys Ala
110 115 120

Leu Gln Arg Val Ala Ile Leu Val Pro His Arg Asn Arg Glu Lys
125 130 135

His Leu Met Tyr Leu Leu Glu His Leu His Pro Phe Leu Gln Arg
140 145 150

Gln Gln Leu Asp Tyr Gly Ile Tyr Val Ile His Gln Ala Glu Gly
155 160 165

Lys Lys Phe Asn Arg Ala Lys Leu Leu Asn Val Gly Tyr Leu Glu
170 175 180

Ala Leu Lys Glu Glu Asn Trp Asp Cys Phe Ile Phe His Asp Val
185 190 195

Asp Leu Val Pro Glu Asn Asp Phe Asn Leu Tyr Lys Cys Glu Glu
200 205 210

His Pro Lys His Leu Val Val Gly Arg Asn Ser Thr Gly Tyr Arg
215 220 225

Leu Arg Tyr Ser Gly Tyr Phe Gly Gly Val Thr Ala Leu Ser Arg
230 235 240

Glu Gln Phe Phe Lys Val Asn Gly Phe Ser Asn Asn Tyr Trp Gly
245 250 255

Trp Gly Gly Glu Asp Asp Asp Leu Arg Leu Arg Val Glu Leu Gln
260 265 270

Arg Met Lys Ile Ser Arg Pro Leu Pro Glu Val Gly Lys Tyr Thr
275 280 285

Met Val Phe His Thr Arg Asp Lys Gly Asn Glu Val Asn Ala Glu
290 295 300

Sequence Listing - P3230R1C1.txt

Arg Met Lys Leu Leu His Gln Val Ser Arg Val Trp Arg Thr Asp
305 310 315

Gly Leu Ser Ser Cys Ser Tyr Lys Leu Val Ser Val Glu His Asn
320 325 330

Pro Leu Tyr Ile Asn Ile Thr Val Asp Phe Trp Phe Gly Ala
335 340

<210> 43

<211> 485

<212> DNA

<213> Homo Sapien

<400> 43

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gtctccagat ctgggccgct tgctctctgc tctctctct cctcggcagc 100

ctgaccagtg gctctgtttt cccacaacag acggggacaac ttgcagagct 150

gcaaccccg gacagagctg gagccagggc cagctggatg cccatgttcc 200

agaggcgaag gaggcgagac accacttcc ccatctgcat ttctgctgc 250

ggctgctgtc atcgatcaaa gtgtgggatg tgctgcaaga cgtagaacct 300

acctgcctg ccccgctccc ctccttctc tattattcc tgctgcccca 350

gaacataggt ctggaataa aatggctggt tctttgttt tcaaaaaaa 400

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 450

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 485

<210> 44

<211> 84

<212> PRT

<213> Homo Sapien

<400> 44

Met Ala Leu Ser Ser Gln Ile Trp Ala Ala Cys Leu Leu Leu Leu

1 5 10 15

Leu Leu Leu Ala Ser Leu Thr Ser Gly Ser Val Phe Pro Gln Gln

20 25 30

Thr Gly Gln Leu Ala Glu Leu Gln Pro Gln Asp Arg Ala Gly Ala

35 40 45

Arg Ala Ser Trp Met Pro Met Phe Gln Arg Arg Arg Arg Asp

50 55 60

Thr His Phe Pro Ile Cys Ile Phe Cys Cys Gly Cys Cys His Arg

65 70 75

Sequence Listing - P3230R1C1.txt

Ser Lys Cys Gly Met Cys Cys Lys Thr
80

<210> 45

<211> 1076

<212> DNA

<213> Homo Sapien

<400> 45

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caacatgcct caccctcatc tatatccttt ggcagctcac agggtcagca 100
gcctctggac ccgtgaaaga gctgggtcgt tccgttggtg gggccgtgac 150
ttccccctg aagtccaaag taaagcaagt tgactctatt gtctggacct 200
tcaacacaac cctcttctg accatacagc cagaaggggg cactatcata 250
gtgacccaaa atcgtaatag ggagagagta gactcccgat atggaggcta 300
ctccctgaag ctacgcaaac tgaagaagaa tgactcaggg atctactatg 350
tggggatata cagctcatca ctccagcagc cctccacca ggagtagctg 400
ctgcatgtct acgagcacct gtcaaagcct aaagtcacca tgggtctgca 450
gagcaataag aatggcacct gtgtgaccaa tctgacatgc tgcatggaac 500
atggggaaga ggatgtgatt tatacctgga aggccctggg gcaagcagcc 550
aatgagtccc ataaggggtc catctctccc atctctctga gatggggaga 600
aagtgatatg accttcatct gcgttgccag gaacctgtc agcagaaact 650
tctcaagccc catccttgcc aggaagctct gtgaagggtg tgctgatgac 700
ccagattctt ccatggtctt cctgtgtctc ctgttggtgc cctctctgt 750
cagtctctt gtactggggc tatttcttgg gtttctgaag agagagagac 800
aagaagagta cattgaagag aagaagagag tggacatttg tcgggaaact 850
cctaacatat gcccccattc tggagagaac acagagtacg acacaatccc 900
tcacactaat agaacaatcc taaaggaaga tccagcaaata acggtttact 950
ccactgtgga aataccgaaa aagatggaaa atccccactc actgctcacg 1000
atgccagaca caccaaggct attgcctat gagaatgta tctagacagc 1050
atgtcactcc cctaagtctc tgctca 1076

<210> 46

Sequence Listing - P3230R1C1.txt

<211> 335

<212> PRT

<213> Homo Sapien

<400> 46

Met Ala Gly Ser Pro Thr Cys Leu Thr Leu Ile Tyr Ile Leu Trp
1 5 10 15

Gln Leu Thr Gly Ser Ala Ala Ser Gly Pro Val Lys Glu Leu Val
20 25 30
Gly Ser Val Gly Gly Ala Val Thr Phe Pro Leu Lys Ser Lys Val
35 40 45

Lys Gln Val Asp Ser Ile Val Trp Thr Phe Asn Thr Thr Pro Leu
50 55 60

Val Thr Ile Gln Pro Glu Gly Gly Thr Ile Ile Val Thr Gln Asn
65 70 75

Arg Asn Arg Glu Arg Val Asp Phe Pro Asp Gly Gly Tyr Ser Leu
80 85 90

Lys Leu Ser Lys Leu Lys Lys Asn Asp Ser Gly Ile Tyr Tyr Val
95 100 105

Gly Ile Tyr Ser Ser Ser Leu Gln Gln Pro Ser Thr Gln Glu Tyr
110 115 120

Val Leu His Val Tyr Glu His Leu Ser Lys Pro Lys Val Thr Met
125 130 135

Gly Leu Gln Ser Asn Lys Asn Gly Thr Cys Val Thr Asn Leu Thr
140 145 150

Cys Cys Met Glu His Gly Glu Glu Asp Val Ile Tyr Thr Trp Lys
155 160 165

Ala Leu Gly Gln Ala Ala Asn Glu Ser His Asn Gly Ser Ile Leu
170 175 180

Pro Ile Ser Trp Arg Trp Gly Glu Ser Asp Met Thr Phe Ile Cys
185 190 195

Val Ala Arg Asn Pro Val Ser Arg Asn Phe Ser Ser Pro Ile Leu
200 205 210

Ala Arg Lys Leu Cys Glu Gly Ala Ala Asp Asp Pro Asp Ser Ser
215 220 225

Met Val Leu Leu Cys Leu Leu Leu Val Pro Leu Leu Leu Ser Leu
230 235 240

Phe Val Leu Gly Leu Phe Leu Trp Phe Leu Lys Arg Glu Arg Gln
245 250 255

Sequence Listing - P3230R1C1.txt

Glu Glu Tyr Ile Glu Glu Lys Lys Arg Val Asp Ile Cys Arg Glu
 260 265 270

Thr Pro Asn Ile Cys Pro His Ser Gly Glu Asn Thr Glu Tyr Asp
 275 280 285

Thr Ile Pro His Thr Asn Arg Thr Ile Leu Lys Glu Asp Pro Ala
 290 295 300

Asn Thr Val Tyr Ser Thr Val Glu Ile Pro Lys Lys Met Glu Asn
 305 310 315

Pro His Ser Leu Leu Thr Met Pro Asp Thr Pro Arg Leu Phe Ala
 320 325 330

Tyr Glu Asn Val Ile
 335

<210> 47

<211> 766

<212> DNA

<213> Homo Sapien

<400> 47

ggctcgagctg ttctcgagcc aggggtgacc atgacctgct gcgaaggatg 50

gacatcctgc aatggattca gcctgctggt tctactgctg ttaggagtag 100

ttctcaatgc gatacctcta attgtcagct tagttgagga agaccaattt 150

tctcaaaacc ccattctctg ctttgagtgg tgggtccag gaattatagg 200

agcagggtctg atggccattc cagcaacaac aatgtccttg acagcaagaa 250

aaagagcgtg ctgcaacaac agaactggaa tgtttcttc atcatttttc 300

agtgtgatca cagtcattgg tgctctgtat tgcattgcta tatccatcca 350

ggctctctta aaaggtcctc tcattgttaa ttctcaagc aacagtaatg 400

ccaattgtga attttcattg aaaaacatca gtgacattca tccagaatcc 450

ttcaacttgc agtgggtttt caatgactct tgtgcacctc ctactggttt 500

caataaacc accagtaacg acaccatggc gagtggctgg agagcatcta 550

gtttccactt cgattctgaa gaaaacaac ataggcttat ccacttctca 600

gtatttttag gtctattgct tgttggaatt ctggaggctc tgtttgggct 650

cagtcagata gtatcgggtt tcttggctg tctgtgtgga gtctctaagc 700

gaagaagtca aattgttag ttaattggga ataaatgta agtatcagta 750

gtttgaaaaa aaaaaa 766

Sequence Listing - P3230R1C1.txt

<210> 48

<211> 229

<212> PRT

<213> Homo Sapien

<400> 48

Met Thr Cys Cys Glu Gly Trp Thr Ser Cys Asn Gly Phe Ser Leu
1 5 10 15

Leu Val Leu Leu Leu Leu Gly Val Val Leu Asn Ala Ile Pro Leu
20 25 30

Ile Val Ser Leu Val Glu Glu Asp Gln Phe Ser Gln Asn Pro Ile
35 40 45

Ser Cys Phe Glu Trp Trp Phe Pro Gly Ile Ile Gly Ala Gly Leu
50 55 60

Met Ala Ile Pro Ala Thr Thr Met Ser Leu Thr Ala Arg Lys Arg
65 70 75

Ala Cys Cys Asn Asn Arg Thr Gly Met Phe Leu Ser Ser Phe Phe
80 85 90

Ser Val Ile Thr Val Ile Gly Ala Leu Tyr Cys Met Leu Ile Ser
95 100 105

Ile Gln Ala Leu Leu Lys Gly Pro Leu Met Cys Asn Ser Pro Ser
110 115 120

Asn Ser Asn Ala Asn Cys Glu Phe Ser Leu Lys Asn Ile Ser Asp
125 130 135

Ile His Pro Glu Ser Phe Asn Leu Gln Trp Phe Phe Asn Asp Ser
140 145 150

Cys Ala Pro Pro Thr Gly Phe Asn Lys Pro Thr Ser Asn Asp Thr
155 160 165

Met Ala Ser Gly Trp Arg Ala Ser Ser Phe His Phe Asp Ser Glu
170 175 180

Glu Asn Lys His Arg Leu Ile His Phe Ser Val Phe Leu Gly Leu
185 190 195

Leu Leu Val Gly Ile Leu Glu Val Leu Phe Gly Leu Ser Gln Ile
200 205 210

Val Ile Gly Phe Leu Gly Cys Leu Cys Gly Val Ser Lys Arg Arg
215 220 225

Ser Gln Ile Val

Sequence Listing - P3230R1C1.txt

<210> 49

<211> 636

<212> DNA

<213> Homo Sapien

<400> 49

atcgttctc tgcgtgccca gctcaggtga gccctgccca aggtgacctc 50
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 ctgaccaatt gagctgtgag cctggagcag atccgtgggc tgcagacccc 150
 cgccccagt cctctcccc tgcagccctg cccctcgaac tgtgacatgg 200
 agagagtgc cctggccctt ctctactgg caggcctgac tgccttgaa 250
 gccaatgacc catttgccaa taaagacgat ccttctact atgactggaa 300
 aaacctgcag ctgagcggac tgatctgcgg agggctcctg gccattgctg 350
 ggtatcgccg agttctgagt ggcaaatgca aatacaagag cagccagaag 400
 cagcacagtc ctgtacctga gaagccatc cactcatca ctccaggctc 450
 tgccactact tgctgagcac aggactggcc tccagggatg gcctgaagcc 500
 taacactggc cccagcacc tcctcccctg ggaggccta tcctcaagga 550
 aggacttctc tcgaagggca ggctgttagg ccccttctg atcaggaggc 600
 ttcttatga attaaactcg cccaccacc ccctca 636

<210> 50

<211> 89

<212> PRT

<213> Homo Sapien

<400> 50

Met Glu Arg Val Thr Leu Ala Leu Leu Leu Ala Gly Leu Thr
 1 5 10 15
 Ala Leu Glu Ala Asn Asp Pro Phe Ala Asn Lys Asp Asp Pro Phe
 20 25 30
 Tyr Tyr Asp Trp Lys Asn Leu Gln Leu Ser Gly Leu Ile Cys Gly
 35 40 45
 Gly Leu Leu Ala Ile Ala Gly Ile Ala Ala Val Leu Ser Gly Lys
 50 55 60
 Cys Lys Tyr Lys Ser Ser Gln Lys Gln His Ser Pro Val Pro Glu
 65 70 75
 Lys Ala Ile Pro Leu Ile Thr Pro Gly Ser Ala Thr Thr Cys
 80 85

Sequence Listing - P3230R1C1.txt

<210> 51

<211> 1734

<212> DNA

<213> Homo Sapien

<400> 51

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gaccagagag gagggaggac agggagtcgg aaggaggagg acagaggagg 100
gcacagagac gcagagcaag ggcggcaagg agggagacct ggtgggagga 150
agacactctg gagagagagg gggctgggca gagatgaagt tccaggggcc 200
ctggcctgc ctctgctgg cctctgcct gggcagtggg gaggctggcc 250
ccctgcagag cggagaggaa agcactggga caaatattgg ggaggccctt 300
ggacatggcc tgggagacgc cctgagcgaa ggggtgggaa aggccattgg 350
caagagggcc ggaggggagc ctggctctaa agtcagttag gcccttgccc 400
aagggaccag agaagcagtt ggcactggag tcaggcaggt tccaggcttt 450
ggcgagcag atgcttggg caacagggtc ggggaagcag cccatgctct 500
gggaaacact gggcacgaga ttggcagaca ggagaagat gtcattcgac 550
acggagcaga tgctgtccgc ggctcctggc aggggggtgc tggccacagt 600
ggtgcttggg aaactcttg aggcacatgc atctttgct ctcaaggtg 650
ccttgagggc caggggcagg gcaatcttg aggtctgggg actcctggg 700
tccacggata ccccgaaac tcagcaggca gctttggaat gaatctcag 750
ggagctcctt ggggtcaagg aggcaatgga gggccaccaa actttgggac 800
caacactcag ggagctgtg cccagcctgg ctatgttca gtgagagcca 850
gcaaccagaa tgaagggtgc acgaatccc caccatctgg ctacggtgga 900
ggctccagca actctggggg aggcagcggc tcacagtcgg gcagcagtg 950
cagtggcagc aatggtgaca acaacaatgg cagcagcagt ggtggcagca 1000
gcagtggcag cagcagtggc agcagcagtg gcggcagcag tggcggcagc 1050
agtgtgtgga gcagtggcaa cagtgtgtgc agcagaggtg acagcggcag 1100
tgagtctctc tggggatcca gcaccggctc ctctccggc aaccaggtg 1150
ggagcggcgg aggaaatgga cataaacccg ggtgtgaaaa gccagggaat 1200
gaagcccgcg ggagcgggga atctgggatt cagggcttca gaggacagg 1250
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Sequence Listing - P3230R1C1.txt

agtttcagc aacatgaggg aaataagcaa agagggcaat cgcctcttg 1300
 gaggtcttg agacaattat cgggggcaag ggtcgagctg gggcagtga 1350
 gggagtgacg ctgttggtgg agtcaatact gtgaactctg agacgtctcc 1400
 tgggatgtt aactttgaca cttctggaa gaattttaa tccaagctgg 1450
 gtttcatcaa ctgggatgcc ataaacaagg accagagaag ctctgcctc 1500
 ccgtgacctc cagacaagga gccaccagat tggatgggag cccccact 1550
 ccttccttaa aacaccacc tctcatcact aatctcagc ctgcccctg 1600
 aaataaacct tagctgcccc acaaaaaaaaa aaaaaaaaaa aaaaaaaaa 1650
 aaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa 1700
 aaaaaaaaa aaaaaaaaa aaaaaaaaa aaaa 1734

<210> 52

<211> 440

<212> PRT

<213> Homo Sapien

<400> 52

Met Lys Phe Gln Gly Pro Leu Ala Cys Leu Leu Leu Ala Leu Cys
 1 5 10 15

Leu Gly Ser Gly Glu Ala Gly Pro Leu Gln Ser Gly Glu Glu Ser
 20 25 30

Thr Gly Thr Asn Ile Gly Glu Ala Leu Gly His Gly Leu Gly Asp
 35 40 45

Ala Leu Ser Gly Val Gly Lys Ala Ile Gly Lys Glu Ala Gly
 50 55 60

Gly Ala Ala Gly Ser Lys Val Ser Glu Ala Leu Gly Gln Gly Thr
 65 70 75

Arg Glu Ala Val Gly Thr Gly Val Arg Gln Val Pro Gly Phe Gly
 80 85 90

Ala Ala Asp Ala Leu Gly Asn Arg Val Gly Glu Ala Ala His Ala
 95 100 105

Leu Gly Asn Thr Gly His Glu Ile Gly Arg Gln Ala Glu Asp Val
 110 115 120

Ile Arg His Gly Ala Asp Ala Val Arg Gly Ser Trp Gln Gly Val
 125 130 135

Pro Gly His Ser Gly Ala Trp Glu Thr Ser Gly Gly His Gly Ile
 140 145 150

Sequence Listing - P3230R1C1.txt

Phe Gly Ser Gln Gly Gly Leu Gly Gly Gln Gly Gln Gly Asn Pro
 155 160 165
 Gly Gly Leu Gly Thr Pro Trp Val His Gly Tyr Pro Gly Asn Ser
 170 175 180
 Ala Gly Ser Phe Gly Met Asn Pro Gln Gly Ala Pro Trp Gly Gln
 185 190 195
 Gly Gly Asn Gly Gly Pro Pro Asn Phe Gly Thr Asn Thr Gln Gly
 200 205 210
 Ala Val Ala Gln Pro Gly Tyr Gly Ser Val Arg Ala Ser Asn Gln
 215 220 225
 Asn Glu Gly Cys Thr Asn Pro Pro Pro Ser Gly Ser Gly Gly Gly
 230 235 240
 Ser Ser Asn Ser Gly Gly Gly Ser Gly Ser Gln Ser Gly Ser Ser
 245 250 255
 Gly Ser Gly Ser Asn Gly Asp Asn Asn Asn Gly Ser Ser Ser Gly
 260 265 270
 Gly Ser Ser Ser Gly Ser Ser Ser Gly Ser Ser Ser Gly Gly Ser
 275 280 285
 Ser Gly Gly Ser Ser Gly Gly Ser Ser Gly Asn Ser Gly Gly Ser
 290 295 300
 Arg Gly Asp Ser Gly Ser Glu Ser Ser Trp Gly Ser Ser Thr Gly
 305 310 315
 Ser Ser Ser Gly Asn His Gly Gly Ser Gly Gly Gly Asn Gly His
 320 325 330
 Lys Pro Gly Cys Glu Lys Pro Gly Asn Glu Ala Arg Gly Ser Gly
 335 340 345
 Glu Ser Gly Ile Gln Gly Phe Arg Gly Gln Gly Val Ser Ser Asn
 350 355 360
 Met Arg Glu Ile Ser Lys Glu Gly Asn Arg Leu Leu Gly Gly Ser
 365 370 375
 Gly Asp Asn Tyr Arg Gly Gln Gly Ser Ser Trp Gly Ser Gly Gly
 380 385 390
 Gly Asp Ala Val Gly Gly Val Asn Thr Val Asn Ser Glu Thr Ser
 395 400 405
 Pro Gly Met Phe Asn Phe Asp Thr Phe Trp Lys Asn Phe Lys Ser
 410 415 420

Sequence Listing - P3230R1C1.txt

Lys Leu Gly Phe Ile Asn Trp Asp Ala Ile Asn Lys Asp Gln Arg
425 430 435

Ser Ser Arg Ile Pro
440

<210> 53

<211> 1676

<212> DNA

<213> Homo Sapien

<400> 53

ggagaagagg ttgtgtggga caagctgctc ccgacagaag gatgtcgtg 50
ctgagcctgc cctggctggg cctcagaccg gtggcaatgt ccccatggct 100
actcctgctg ctggttggtg gctcctggct actcggccgc atcctggctt 150
ggacctatgc cttctataac aactgccgcc ggctccagtg ttcccacag 200
cccccaaac ggaactggtt ttggggtcac ctgggctga tcaactctac 250
agaggaggcg ttgaaggact cgaccagat gtcggccacc tattccagg 300
gctttacggt atggctgggt cccatcatcc ccttcactgt tttatgccac 350
cctgacacca tccggtctat caccaatgcc tcagctgcca ttgcacccaa 400
ggataatctc ttcacaggt tctgaagcc ctggctggga gaagggatac 450
tgctgagtgg cggtgacaag tggagccgcc accgtcggat gctgacgcc 500
gccttcatt tcaacatct gaagtctat ataacgatct tcaacaagag 550
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cagaaatgca tcttcagctt tgacagccat tgtcaggaga ggcccagtga 700
atatattgcc accatcttg agctcagtgc cttgttagag aaaagaagcc 750
agcatatcct ccagcacatg gactttctgt attactctc ccatgacggg 800
cggcgcttcc acagggctg ccgctgggt catgacttca cagacgctgt 850
catccgggag cggcgctgca cctcccccac tcagggtatt gatgatttt 900
tcaaagacaa agccaagtcc aagactttgg atttcattga tgtgctctg 950
ctgagcaagg atgaagatgg gaaggcattg tcagatgagg atataagagc 1000
agaggctgac acctcatgt ttggaggcca tgacaccag gccagtggcc 1050
tctcctgggt cctgtacaac cttgcgagc accagaata ccaggagcgc 1100

Sequence Listing - P3230R1C1.txt

tgccgacagg aggtgcaaga gcttctgaag gaccgcgac ctaaagagat 1150
 tgaatgggac gacctggccc agctgccctt cctgaccatg tgcgtgaagg 1200
 agagcctgag gttacatccc ccagctccct tcatctccg atgctgacc 1250
 caggacattg ttctcccaga tggccgagtc atcccaaag gcattacctg 1300
 cctcatcgat attatagggg tccatcaca ccaactgtg tggccggatc 1350
 ctgagggtcta cgacccttc cgctttgacc cagagaacag caaggggagg 1400
 tcacctctgg cttttattcc ttctccgca gggcccagga actgcatcgg 1450
 gcaggcggtc gccatggcgg agatgaaagt ggtcttgagg ttgatgtgc 1500
 tgcacttccg gttctgcca gaccacactg agccccgag gaagctggaa 1550
 ttgatcatgc gcgccgagg cgggctttgg ctgagggtgg agccccgaa 1600
 ttaggcttg cagtgacttt ctgaccatc cacctgtttt ttgcagatt 1650
 gtcataata aaacggtgct gtcaaa 1676

<210> 54

<211> 524

<212> PRT

<213> Homo Sapien

<400> 54

Met Ser Leu Leu Ser Leu Pro Trp Leu Gly Leu Arg Pro Val Ala
 1 5 10 15

Met Ser Pro Trp Leu Leu Leu Leu Val Val Gly Ser Trp Leu
 20 25 30

Leu Ala Arg Ile Leu Ala Trp Thr Tyr Ala Phe Tyr Asn Asn Cys
 35 40 45

Arg Arg Leu Gln Cys Phe Pro Gln Pro Pro Lys Arg Asn Trp Phe
 50 55 60

Trp Gly His Leu Gly Leu Ile Thr Pro Thr Glu Glu Gly Leu Lys
 65 70 75

Asp Ser Thr Gln Met Ser Ala Thr Tyr Ser Gln Gly Phe Thr Val
 80 85 90

Trp Leu Gly Pro Ile Ile Pro Phe Ile Val Leu Cys His Pro Asp
 95 100 105

Thr Ile Arg Ser Ile Thr Asn Ala Ser Ala Ala Ile Ala Pro Lys
 110 115 120

Asp Asn Leu Phe Ile Arg Phe Leu Lys Pro Trp Leu Gly Glu Gly
 125 130 135

Sequence Listing - P3230R1C1.txt

```

Ile Leu Leu Ser Gly Gly Asp Lys Trp Ser Arg His Arg Arg Met
  140           145           150

Leu Thr Pro Ala Phe His Phe Asn Ile Leu Lys Ser Tyr Ile Thr
  155           160           165

Ile Phe Asn Lys Ser Ala Asn Ile Met Leu Asp Lys Trp Gln His
  170           175           180

Leu Ala Ser Glu Gly Ser Ser Arg Leu Asp Met Phe Glu His Ile
  185           190           195

Ser Leu Met Thr Leu Asp Ser Leu Gln Lys Cys Ile Phe Ser Phe
  200           205           210

Asp Ser His Cys Gln Glu Arg Pro Ser Glu Tyr Ile Ala Thr Ile
  215           220           225

Leu Glu Leu Ser Ala Leu Val Glu Lys Arg Ser Gln His Ile Leu
  230           235           240

Gln His Met Asp Phe Leu Tyr Tyr Leu Ser His Asp Gly Arg Arg
  245           250           255

Phe His Arg Ala Cys Arg Leu Val His Asp Phe Thr Asp Ala Val
  260           265           270

Ile Arg Glu Arg Arg Arg Thr Leu Pro Thr Gln Gly Ile Asp Asp
  275           280           285

Phe Phe Lys Asp Lys Ala Lys Ser Lys Thr Leu Asp Phe Ile Asp
  290           295           300

Val Leu Leu Leu Ser Lys Asp Glu Asp Gly Lys Ala Leu Ser Asp
  305           310           315

Glu Asp Ile Arg Ala Glu Ala Asp Thr Phe Met Phe Gly Gly His
  320           325           330

Asp Thr Thr Ala Ser Gly Leu Ser Trp Val Leu Tyr Asn Leu Ala
  335           340           345

Arg His Pro Glu Tyr Gln Glu Arg Cys Arg Gln Glu Val Gln Glu
  350           355           360

Leu Leu Lys Asp Arg Asp Pro Lys Glu Ile Glu Trp Asp Asp Leu
  365           370           375

Ala Gln Leu Pro Phe Leu Thr Met Cys Val Lys Glu Ser Leu Arg
  380           385           390

Leu His Pro Pro Ala Pro Phe Ile Ser Arg Cys Cys Thr Gln Asp
  395           400           405

```

Sequence Listing - P3230R1C1.txt

```

Ile Val Leu Pro Asp Gly Arg Val Ile Pro Lys Gly Ile Thr Cys
    410          415          420

Leu Ile Asp Ile Ile Gly Val His His Asn Pro Thr Val Trp Pro
    425          430          435

Asp Pro Glu Val Tyr Asp Pro Phe Arg Phe Asp Pro Glu Asn Ser
    440          445          450

Lys Gly Arg Ser Pro Leu Ala Phe Ile Pro Phe Ser Ala Gly Pro
    455          460          465

Arg Asn Cys Ile Gly Gln Ala Phe Ala Met Ala Glu Met Lys Val
    470          475          480

Val Leu Ala Leu Met Leu Leu His Phe Arg Phe Leu Pro Asp His
    485          490          495

Thr Glu Pro Arg Arg Lys Leu Glu Leu Ile Met Arg Ala Glu Gly
    500          505          510

Gly Leu Trp Leu Arg Val Glu Pro Leu Asn Val Gly Leu Gln
    515          520

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<210> 55

<211> 644

<212> DNA

<213> Homo Sapien

<400> 55

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atcgcatcaa ttgggagtac catcttctc atgggaccag tgaacagct 50
gaagcgaatg ttgagccta ctggtttgat tgcaactatc atggtgctgt 100
tgtgtttgc acttaccctg tgttctgcct ttggtggca taacaaggga 150
cttgcaacta tcttctgcat ttgcagctc ttggcattga cgtggtacag 200
ccttctctc ataccatttg caagggatgc tgtgaagaag tgtttgccc 250
tgtgtcttg ataattcatg gccagtttta tgaagcttgg gaaggcacta 300
tggacagaag ctggtggaca gttttgtaac tatcttcgaa acctctgtct 350
tacagacatg tgccttttat ctgcagcaa tgttgtgctt gtgattcgaa 400
catttgaggg ttacttttgg aagcaacaat acattctcga acctgaatgt 450
cagtagcaca ggatgagaag tgggttctgt atcttgtgga gtggaatctt 500
cctcatgtac ctgtttctc tctggatgtt gtccactga attcccatga 550
atacaaacct attcagcaac agcaaaaaaa aaaaaaaaaa aaaaaaaaaa 600
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 644

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Sequence Listing - P3230R1C1.txt

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<210> 56
<211> 77
<212> PRT
<213> Homo Sapien
<400> 56
Met Gly Pro Val Lys Gln Leu Lys Arg Met Phe Glu Pro Thr Arg
 1         5         10        15
Leu Ile Ala Thr Ile Met Val Leu Leu Cys Phe Ala Leu Thr Leu
 20        25        30
Cys Ser Ala Phe Trp Trp His Asn Lys Gly Leu Ala Leu Ile Phe
 35        40        45
Cys Ile Leu Gln Ser Leu Ala Leu Thr Trp Tyr Ser Leu Ser Phe
 50        55        60
Ile Pro Phe Ala Arg Asp Ala Val Lys Lys Cys Phe Ala Val Cys
 65        70        75
Leu Ala

<210> 57
<211> 3334
<212> DNA
<213> Homo Sapien

<400> 57
cggctcgagc tcgagccgaa tcggctcgag gggcagtgga gcacccagca 50
ggccgccaac atgctctgtc tgtgcctgta cgtgccggtc atcggggaag 100
ccagaccga gttccagtac ttgagtcga aggggctccc tgccgagctg 150
aagtcattt tcaagctcag tgtcttcac cctcccagg aattctcac 200
ctaccgccag tggaagcaga aaattgtaca agctggagat aaggaccttg 250
atgggcagct agactttgaa gaattgtcc attatctcca agatcatgag 300
aagaagctga ggctggtgtt taagattttg gacaaaaaga atgatggacg 350
cattgacgcg caggagatca tgcagtcctt gcgggacttg ggagtcaaga 400
tatctgaaca gcaggcagaa aaaattctca agagcatgga taaaacggc 450
acgatgacca tcgactggaa cgagtggaga gactaccacc tcctccacc 500
cgtggaaaac atccccgaga tcattctcta ctggaagcat tccacgatct 550
ttgatgtggg tgagaatcta acggtccccg atgagttcac agtggaggag 600
aggcagacgg ggatgtggtg gagacacctg gtggcaggag gtggggcagg 650

```

Sequence Listing - P3230R1C1.txt

ggccgtatcc agaacctgca cgccccccct ggacaggctc aagggtgctca 700
 tgcagggtcca tgcctcccgc agcaacaaca tgggcatcgt tggtggttc 750
 actcagatga ttcgagaagg agggggccagg tcaactctggc ggggcaatgg 800
 catcaacgtc ctcaaaattg ccccccgaatc agccatcaaa ttcattgacct 850
 atgagcagat caagcgcctt gttggtagtg accaggagac tctgaggatt 900
 cacgagaggc ttgtggcagg gtccttgga ggggccatcg cccagagcag 950
 catctacca atggagggtcc tgaagaccg gatggcgctg cggaagacag 1000
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 ccctatgcc ggcacgacc ttgcagtcta cgagacgctc aagaatgcct 1150
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 ctggcctgtg gcacatgtc cagtactgt ggccagctgg ccagctaccc 1250
 cctggcccta gtcaggacc ggatgcaggc gcaagcctct attgagggcg 1300
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 ggggccttcg ggctgtacag ggggctggcc cccaacttca tgaagggtcat 1400
 ccagctgtg agcatcagct acgtggtcta cgagaacctg aagatcacc 1450
 tgggcgtgca gtcgcggtga cggggggagg gccgccggc agtggaactc 1500
 ctgatcctgg gccgcagcct ggggtgtgca gccatctcat tctgtgaatg 1550
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 cgcaggagg gtgaggagag ctggcaggcc cagggttgt cctgctgacc 1650
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 caacctacag cattgacgcc aactggctg tgaaggaaga ggaagagatc 2050

Sequence Listing - P3230R1C1.txt

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 aatagcttgt catttcaag ttcatTTTT attcatatt atgttcatgg 2650
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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 3334

<210> 58

<211> 469

Sequence Listing - P3230R1C1.txt

<212> PRT

<213> Homo Sapien

<400> 58

Met Leu Cys Leu Cys Leu Tyr Val Pro Val Ile Gly Glu Ala Gln
1 5 10 15

Thr Glu Phe Gln Tyr Phe Glu Ser Lys Gly Leu Pro Ala Glu Leu
20 25 30

Lys Ser Ile Phe Lys Leu Ser Val Phe Ile Pro Ser Gln Glu Phe
35 40 45

Ser Thr Tyr Arg Gln Trp Lys Gln Lys Ile Val Gln Ala Gly Asp
50 55 60

Lys Asp Leu Asp Gly Gln Leu Asp Phe Glu Glu Phe Val His Tyr
65 70 75

Leu Gln Asp His Glu Lys Lys Leu Arg Leu Val Phe Lys Ile Leu
80 85 90

Asp Lys Lys Asn Asp Gly Arg Ile Asp Ala Gln Glu Ile Met Gln
95 100 105

Ser Leu Arg Asp Leu Gly Val Lys Ile Ser Glu Gln Gln Ala Glu
110 115 120

Lys Ile Leu Lys Ser Met Asp Lys Asn Gly Thr Met Thr Ile Asp
125 130 135

Trp Asn Glu Trp Arg Asp Tyr His Leu Leu His Pro Val Glu Asn
140 145 150

Ile Pro Glu Ile Ile Leu Tyr Trp Lys His Ser Thr Ile Phe Asp
155 160 165

Val Gly Glu Asn Leu Thr Val Pro Asp Glu Phe Thr Val Glu Glu
170 175 180

Arg Gln Thr Gly Met Trp Trp Arg His Leu Val Ala Gly Gly Gly
185 190 195

Ala Gly Ala Val Ser Arg Thr Cys Thr Ala Pro Leu Asp Arg Leu
200 205 210

Lys Val Leu Met Gln Val His Ala Ser Arg Ser Asn Asn Met Gly
215 220 225

Ile Val Gly Gly Phe Thr Gln Met Ile Arg Glu Gly Gly Ala Arg
230 235 240

Ser Leu Trp Arg Gly Asn Gly Ile Asn Val Leu Lys Ile Ala Pro
245 250 255

Sequence Listing - P3230R1C1.txt

Glu Ser Ala Ile Lys Phe Met Ala Tyr Glu Gln Ile Lys Arg Leu
 260 265 270

Val Gly Ser Asp Gln Glu Thr Leu Arg Ile His Glu Arg Leu Val
 275 280 285

Ala Gly Ser Leu Ala Gly Ala Ile Ala Gln Ser Ser Ile Tyr Pro
 290 295 300

Met Glu Val Leu Lys Thr Arg Met Ala Leu Arg Lys Thr Gly Gln
 305 310 315

Tyr Ser Gly Met Leu Asp Cys Ala Arg Arg Ile Leu Ala Arg Glu
 320 325 330

Gly Val Ala Ala Phe Tyr Lys Gly Tyr Val Pro Asn Met Leu Gly
 335 340 345

Ile Ile Pro Tyr Ala Gly Ile Asp Leu Ala Val Tyr Glu Thr Leu
 350 355 360

Lys Asn Ala Trp Leu Gln His Tyr Ala Val Asn Ser Ala Asp Pro
 365 370 375

Gly Val Phe Val Leu Leu Ala Cys Gly Thr Met Ser Ser Thr Cys
 380 385 390

Gly Gln Leu Ala Ser Tyr Pro Leu Ala Leu Val Arg Thr Arg Met
 395 400 405

Gln Ala Gln Ala Ser Ile Glu Gly Ala Pro Glu Val Thr Met Ser
 410 415 420

Ser Leu Phe Lys His Ile Leu Arg Thr Glu Gly Ala Phe Gly Leu
 425 430 435

Tyr Arg Gly Leu Ala Pro Asn Phe Met Lys Val Ile Pro Ala Val
 440 445 450

Ser Ile Ser Tyr Val Val Tyr Glu Asn Leu Lys Ile Thr Leu Gly
 455 460 465

Val Gln Ser Arg

<210> 59

<211> 1658

<212> DNA

<213> Homo Sapien

<400> 59

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ttccccagcc atggcttccc tggggcagat cctctctgg agcataatta 100

Sequence Listing - P3230R1C1.txt

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 atttcaggga gacactccat cacagtcact actgtcgcct cagctgggaa 200
 cattggggag gatggaatcc tgagctgcac ttttgaacct gacataaac 250
 tttctgatat cgtgatacaa tggctgaagg aagggtgttt aggcttggc 300
 catgagttca aagaaggcaa agatgagctg tcggagcagg atgaatatgt 350
 cagaggccgg acagcagtgt ttgctgatca agtgatagtt ggcaatgcct 400
 ctttcgggct gaaaaacgtg caactcacag atgctggcac ctacaaatgt 450
 tataatcatc cttctaagg caagggaat gctaaccctg agtataaaa 500
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 tgggcatccc aagttgacca gggagccaac ttctcggaag tctcaatac 650
 cagctttgag ctgaactctg agaatgtgac catgaagggt gtgtctgtgc 700
 tctacaatgt tacgatcaac aacacatact cctgtatgat tgaataatgac 750
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 agcaagaac aaaaagaagc caaaagcaga aggtccaat atgaacaaga 1100
 taaatctatc ttcaagaca tattagaagt tgggaaaata attcatgtga 1150
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 gcatccccag atctcaggga cctccccctg cctgtcacct ggggagtgag 1250
 aggacaggat agtgcatgtt cttgtctct gaatttttag ttatatgtgc 1300
 tghtaatgtg ctctgaggaa gccctggaa agtctatccc aacatatcca 1350
 catcttatat tccacaaat aagctgtagt atgtacccta agacgctgct 1400
 aattgactgc cacttcgcaa ctcaggggag gctgcatttt agtaatgggt 1450
 caaatgattc actttttatg atgcttcaa aggtgccttg gcttctctc 1500

Sequence Listing - P3230R1C1.txt

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acagagcagt cggggacacc gattttataa ataaactgag caccttcttt 1600
ttaaacaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1650
aaaaaaaa 1658

<210> 60
<211> 282
<212> PRT
<213> Homo Sapien

<400> 60
Met Ala Ser Leu Gly Gln Ile Leu Phe Trp Ser Ile Ile Ser Ile
1 5 10 15
Ile Ile Ile Leu Ala Gly Ala Ile Ala Leu Ile Ile Gly Phe Gly
20 25 30
Ile Ser Gly Arg His Ser Ile Thr Val Thr Thr Val Ala Ser Ala
35 40 45
Gly Asn Ile Gly Glu Asp Gly Ile Leu Ser Cys Thr Phe Glu Pro
50 55 60
Asp Ile Lys Leu Ser Asp Ile Val Ile Gln Trp Leu Lys Glu Gly
65 70 75
Val Leu Gly Leu Val His Glu Phe Lys Glu Gly Lys Asp Glu Leu
80 85 90
Ser Glu Gln Asp Glu Met Phe Arg Gly Arg Thr Ala Val Phe Ala
95 100 105
Asp Gln Val Ile Val Gly Asn Ala Ser Leu Arg Leu Lys Asn Val
110 115 120
Gln Leu Thr Asp Ala Gly Thr Tyr Lys Cys Tyr Ile Ile Thr Ser
125 130 135
Lys Gly Lys Gly Asn Ala Asn Leu Glu Tyr Lys Thr Gly Ala Phe
140 145 150
Ser Met Pro Glu Val Asn Val Asp Tyr Asn Ala Ser Ser Glu Thr
155 160 165
Leu Arg Cys Glu Ala Pro Arg Trp Phe Pro Gln Pro Thr Val Val
170 175 180
Trp Ala Ser Gln Val Asp Gln Gly Ala Asn Phe Ser Glu Val Ser
185 190 195
Asn Thr Ser Phe Glu Leu Asn Ser Glu Asn Val Thr Met Lys Val
200 205 210

Sequence Listing - P3230R1C1.txt

Val Ser Val Leu Tyr Asn Val Thr Ile Asn Asn Thr Tyr Ser Cys
215 220 225

Met Ile Glu Asn Asp Ile Ala Lys Ala Thr Gly Asp Ile Lys Val
230 235 240

Thr Glu Ser Glu Ile Lys Arg Arg Ser His Leu Gln Leu Leu Asn
245 250 255

Ser Lys Ala Ser Leu Cys Val Ser Ser Phe Phe Ala Ile Ser Trp
260 265 270

Ala Leu Leu Pro Leu Ser Pro Tyr Leu Met Leu Lys
275 280

<210> 61

<211> 1617

<212> DNA

<213> Homo Sapien

<400> 61

tgacgtcaga atcaccatgg ccagctatcc ttaccggcag ggctgcccag 50
gagctgcagg acaagcacca ggagcccttc cgggtagcta ctacctgga 100
cccccaata gtggagggca gtatggtagt gggctacccc ctgggtggtg 150
ttatgggggt cctgcccctg gagggcctta tggaccacca gctggtggag 200
ggccctatgg acacccaat cctgggatgt tcccctctgg aactccagga 250
ggacatatg gcggtgcagc tcccgggggc ccctatggtc agccacctcc 300
aagttcttac ggtgcccagc agcctgggct ttatggagag ggtggcgccc 350
ctcccaatgt ggatcctgag gcctactcct ggttcagtc ggtggactca 400
gatcacagtg gctatatctc catgaaggag ctaaagcagg ccctgtgtaa 450
ctgcaattgg tcttcattca atgatgagac ctgcctcatg atgataaaca 500
tgtttgacaa gaccaagtca ggccgcatcg atgtctacgg cttctcagcc 550
ctgtggaat tcattccagca gtggaagaac ctcttcagc agtatgaccg 600
ggaccgctcg ggtccatta gctacacaga gctgcagcaa gctctgtccc 650
aaatgggcta caacctgagc ccccagttca ccagcttct ggtctccgc 700
tactgccac gctctgcaa tcctgccatg cagcttgacc gcttaccaca 750
ggtgtgcacc cagctgcagg tgtgacaga ggccttcggg gagaaggaca 800
cagctgtaca aggcaacatc cggctcagct tcgaggactt cgtcaccatg 850

Sequence Listing - P3230R1C1.txt

acagcttctc ggatgctatg acccaacat ctgtggagag tggagtgcac 900
cagggacatt tcctggcttc tttagtgtag agaagtatgt ggacatctct 950
cttttcttg tccctctaga agaacattct cccttgcttg atgcaacact 1000
gttccaaaag aggggtggaga gtcctgcac atagccacca aatagtgagg 1050
accggggctg agggccacaca gataggggcc tgatggagga gaggatagaa 1100
gttgatgtc ctgatggcca tgagcagttg agtggcacag cctggcacca 1150
ggagcaggtc cttgtaatgg agtttagtgc cagtcagctg agtccaccc 1200
tgatgccagt ggtgagtgtt catcggcctg ttaccgttag tacctgtgtt 1250
ccctcaccag gccatcctgt caaacgagcc cttttctcc aaagtggaat 1300
ctgaccaagc atgagagaga tctgtctatg ggaccagtgg cttggattct 1350
gccacacca taaatccttg tgtgttaact tctagctgcc tggggctggc 1400
cctgctcaga caaatctgct ccctgggcat ctttgccag gcttctgcc 1450
cctgcagctg ggaccctca cttgcctgcc atgctctgct cggcttcagt 1500
ctccaggaga cagtgggtcac ctctccctgc caatactttt ttaatttgc 1550
atttttttc atttggggcc aaaagtcag tgaattgta agcttcaata 1600
aaaggatgaa actctga 1617

<210> 62

<211> 284

<212> PRT

<213> Homo Sapien

<400> 62

Met Ala Ser Tyr Pro Tyr Arg Gln Gly Cys Pro Gly Ala Ala Gly
1 5 10 15

Gln Ala Pro Gly Ala Pro Pro Gly Ser Tyr Tyr Pro Gly Pro Pro
20 25 30

Asn Ser Gly Gly Gln Tyr Gly Ser Gly Leu Pro Pro Gly Gly Gly
35 40 45

Tyr Gly Gly Pro Ala Pro Gly Gly Pro Tyr Gly Pro Pro Ala Gly
50 55 60

Gly Gly Pro Tyr Gly His Pro Asn Pro Gly Met Phe Pro Ser Gly
65 70 75

Thr Pro Gly Gly Pro Tyr Gly Gly Ala Ala Pro Gly Gly Pro Tyr

Sequence Listing - P3230R1C1.txt

80	85	90
Gly Gln Pro Pro Pro Ser Ser Tyr Gly Ala Gln Gln Pro Gly Leu		
95	100	105
Tyr Gly Gln Gly Gly Ala Pro Pro Asn Val Asp Pro Glu Ala Tyr		
110	115	120
Ser Trp Phe Gln Ser Val Asp Ser Asp His Ser Gly Tyr Ile Ser		
125	130	135
Met Lys Glu Leu Lys Gln Ala Leu Val Asn Cys Asn Trp Ser Ser		
140	145	150
Phe Asn Asp Glu Thr Cys Leu Met Met Ile Asn Met Phe Asp Lys		
155	160	165
Thr Lys Ser Gly Arg Ile Asp Val Tyr Gly Phe Ser Ala Leu Trp		
170	175	180
Lys Phe Ile Gln Gln Trp Lys Asn Leu Phe Gln Gln Tyr Asp Arg		
185	190	195
Asp Arg Ser Gly Ser Ile Ser Tyr Thr Glu Leu Gln Gln Ala Leu		
200	205	210
Ser Gln Met Gly Tyr Asn Leu Ser Pro Gln Phe Thr Gln Leu Leu		
215	220	225
Val Ser Arg Tyr Cys Pro Arg Ser Ala Asn Pro Ala Met Gln Leu		
230	235	240
Asp Arg Phe Ile Gln Val Cys Thr Gln Leu Gln Val Leu Thr Glu		
245	250	255
Ala Phe Arg Glu Lys Asp Thr Ala Val Gln Gly Asn Ile Arg Leu		
260	265	270
Ser Phe Glu Asp Phe Val Thr Met Thr Ala Ser Arg Met Leu		
275	280	

<210> 63

<211> 1234

<212> DNA

<213> Homo Sapien

<400> 63

caggatgcag ggccgcgtgg cagggagctg cgctctctg ggcctgctcc 50

tggctgtct tcattccca ggcctcttg cccggagcat cgggtgttg 100
gaggagaaa ttcccaaaa ctcgggacc aactgcctc agctcgaca 150

acctctctc actggccct ctaactctga acatccgag cccgctctgg 200

accctaggtc taatgacttg gcaagggttc ctctgaagct cagcgtgct 250

Sequence Listing - P3230R1C1.txt

ccatcagatg gcttccacc tgcaggaggt tctgcagtgc agaggtggcc 300
 tccatcgtgg gggctgcctg ccatggattc ctggcccctt gaggatcctt 350
 ggcagatgat ggctgctgcg gctgaggacc gcctggggga agcgctgcct 400
 gaagaactct ctacctctc cagtgcctgc gccctgcctc cgggcagtgg 450
 ccctttgcct ggggagtctt ctcccgatgc cacaggcctc tcacctgagg 500
 ctctactcct ccaccaggac tcggagtcca gacgactgcc ccgttcta 550
 tctactggag cggggggaaa aatccttcc caacgccctc cctggtctct 600
 catccacagg gttctgcctg atcacccctg gggtagcctg aatccagtg 650
 tgtcctgggg aggtggaggc cctgggactg gttggggaac gaggccatg 700
 ccacaccctg agggaatctg gggtagcaat aataacccc caggtagg 750
 ctggggaaat attaatcggg atccaggagg cagctgggga aatattaatc 800
 ggtatccagg aggcagctgg gggaatatta atcggtatcc aggaggcagc 850
 tgggggaata ttcatctata ccaggtatc aataacccat ttctcctgg 900
 agttctccgc cctcctggct ctcttgga caeccagct ggcttcccta 950
 atctccaag ccctaggttg cagtggggct agagcacgat agagggaaac 1000
 ccaacattgg gagttagagt cctgctccg cccctgctg tgtgggtca 1050
 atccaggccc tgtaacatg ttccagcac tatcccact tttagtgcc 1100
 tccctgctc atctcaata aaataaaagc acttatgaaa aaaaaaaaaa 1150
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1200
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1234

<210> 64

<211> 325

<212> PRT

<213> Homo Sapien

<400> 64

Met Gln Gly Arg Val Ala Gly Ser Cys Ala Pro Leu Gly Leu Leu

1 5 10 15

Leu Val Cys Leu His Leu Pro Gly Leu Phe Ala Arg Ser Ile Gly

20 25 30

Val Val Glu Glu Lys Val Ser Gln Asn Phe Gly Thr Asn Leu Pro

35 40 45

Sequence Listing - P3230R1C1.txt

Gln Leu Gly Gln Pro Ser Ser Thr Gly Pro Ser Asn Ser Glu His
50 55 60

Pro Gln Pro Ala Leu Asp Pro Arg Ser Asn Asp Leu Ala Arg Val
65 70 75

Pro Leu Lys Leu Ser Val Pro Pro Ser Asp Gly Phe Pro Pro Ala
80 85 90

Gly Gly Ser Ala Val Gln Arg Trp Pro Pro Ser Trp Gly Leu Pro
95 100 105

Ala Met Asp Ser Trp Pro Pro Glu Asp Pro Trp Gln Met Met Ala
110 115 120

Ala Ala Ala Glu Asp Arg Leu Gly Glu Ala Leu Pro Glu Glu Leu
125 130 135

Ser Tyr Leu Ser Ser Ala Ala Leu Ala Pro Gly Ser Gly Pro
140 145 150

Leu Pro Gly Glu Ser Ser Pro Asp Ala Thr Gly Leu Ser Pro Glu
155 160 165

Ala Ser Leu Leu His Gln Asp Ser Glu Ser Arg Arg Leu Pro Arg
170 175 180

Ser Asn Ser Leu Gly Ala Gly Gly Lys Ile Leu Ser Gln Arg Pro
185 190 195

Pro Trp Ser Leu Ile His Arg Val Leu Pro Asp His Pro Trp Gly
200 205 210

Thr Leu Asn Pro Ser Val Ser Trp Gly Gly Gly Gly Pro Gly Thr
215 220 225

Gly Trp Gly Thr Arg Pro Met Pro His Pro Glu Gly Ile Trp Gly
230 235 240

Ile Asn Asn Gln Pro Pro Gly Thr Ser Trp Gly Asn Ile Asn Arg
245 250 255

Tyr Pro Gly Gly Ser Trp Gly Asn Ile Asn Arg Tyr Pro Gly Gly
260 265 270

Ser Trp Gly Asn Ile Asn Arg Tyr Pro Gly Gly Ser Trp Gly Asn
275 280 285

Ile His Leu Tyr Pro Gly Ile Asn Asn Pro Phe Pro Pro Gly Val
290 295 300

Leu Arg Pro Pro Gly Ser Ser Trp Asn Ile Pro Ala Gly Phe Pro
305 310 315

Asn Pro Pro Ser Pro Arg Leu Gln Trp Gly

320

325

<210> 65
 <211> 422
 <212> DNA
 <213> Homo Sapien

<400> 65
 aaggagaggc caccgggact tcagtgtctc ctccatccca ggagcgcagt 50
 ggccactatg gggctctgggc tgcccttctg cctcctcttg accctccttg 100
 gcagctcaca tggaacaggc cggggtatga ctttgcaact gaagctgaag 150
 gattcttttc tgacaaattc ctctatgag tccagcttcc tgggaattgct 200
 tgaaaagctc tgctctctcc tccatctccc ttcaggggacc agcgtcacc 250
 tccacctatgc aagatctcaa caccatgttg tctgcaacac atgacagcca 300
 ttgaagcctg tgtccttctt ggcccgggct ttggggcgg ggatgcagga 350
 ggaggagccc gacctgtctt ttcagcaggc cccaccctc ctgagtggca 400
 ataaataaaa ttcggtatgc tg 422

<210> 66
 <211> 78
 <212> PRT
 <213> Homo Sapien

<400> 66
 Met Gly Ser Gly Leu Pro Leu Val Leu Leu Leu Thr Leu Leu Gly
 1 5 10 15
 Ser Ser His Gly Thr Gly Pro Gly Met Thr Leu Gln Leu Lys Leu
 20 25 30
 Lys Glu Ser Phe Leu Thr Asn Ser Ser Tyr Glu Ser Ser Phe Leu
 35 40 45
 Glu Leu Leu Glu Lys Leu Cys Leu Leu Leu His Leu Pro Ser Gly
 50 55 60
 Thr Ser Val Thr Leu His His Ala Arg Ser Gln His His Val Val
 65 70 75
 Cys Asn Thr

<210> 67
 <211> 744
 <212> DNA
 <213> Homo Sapien

Sequence Listing - P3230R1C1.txt

<400> 67

acggaccgag gggtcgaggg agggacacgg accaggaacc tgagctaggt 50
 caaagacgcc cgggccaggt gccccgtcgc aggtgccctt ggccggagat 100
 gcggtaggag gggcgagcgc gagaagcccc ttctcggcg ctgccaacct 150
 gccaccacgc ccatggcgaa ccccgggctg gggctgcttc tggcgtggg 200
 cctgcggttc ctgctggccc gctggggcgg agcctggggg caaatacaga 250
 ccactctgc aaatgagaat agcactgttt tgccttcac caccagctcc 300
 agctccgatg gcaacctcgc tccggaagcc atcactgcta tcactgtggt 350
 cttctccctc ttggctgctt tgctctggc tgtggggctg gcactgttg 400
 tgcggaagct tcgggagaag cggcagacgg agggcaccta ccggccact 450
 agcgaggagc agttctccca tgcacccgag gcccgggccc ctgaggactc 500
 caaggagacg gtgcagggct gcctgcccat ctaggctccc tctctgcat 550
 ctgtctccct tcattgctgt gtgaccttgg ggaaggcag tgcctctct 600
 gggcagtcag atccaccag tgcttaatag caggaagaa ggtacttaa 650
 agactctgcc cctgaggtca agagaggatg gggctattca cttttatata 700
 tttatataaa attagtagtg agatgtaaaa aaaaaaaaaa aaaa 744

<210> 68

<211> 123

<212> PRT

<213> Homo Sapien

<400> 68

Met	Ala	Asn	Pro	Gly	Leu	Gly	Leu	Leu	Leu	Ala	Leu	Gly	Leu	Pro
1		5				10						15		
Phe	Leu	Leu	Ala	Arg	Trp	Gly	Arg	Ala	Trp	Gly	Gln	Ile	Gln	Thr
	20					25				30				
Thr	Ser	Ala	Asn	Glu	Asn	Ser	Thr	Val	Leu	Pro	Ser	Ser	Thr	Ser
	35					40				45				
Ser	Ser	Ser	Asp	Gly	Asn	Leu	Arg	Pro	Glu	Ala	Ile	Thr	Ala	Ile
	50					55				60				
Ile	Val	Val	Phe	Ser	Leu	Leu	Ala	Ala	Leu	Leu	Leu	Ala	Val	Gly
	65					70				75				
Leu	Ala	Leu	Leu	Val	Arg	Lys	Leu	Arg	Glu	Lys	Arg	Gln	Thr	Glu
	80					85				90				
Gly	Thr	Tyr	Arg	Pro	Ser	Ser	Glu	Glu	Gln	Phe	Ser	His	Ala	Ala

Sequence Listing - P3230R1C1.txt

95 100 105

Glu Ala Arg Ala Pro Gln Asp Ser Lys Glu Thr Val Gln Gly Cys
110 115 120

Leu Pro Ile

<210> 69

<211> 3265

<212> DNA

<213> Homo Sapien

<400> 69

gccaggaata actagagagg aacaatgggg ttattcagag gttttgttt 50
cctcttagtt ctgtgcctgc tgcaccagtc aaatacttc ttcatgaagc 100

tgaataataa tggccttgaa gatattgtca ttgtataga tcttagtggt 150

ccagaagatg aaaaaataat tgaacaata gaggatatgg tgactacagc 200

ttctacgtac ctgtttgaag ccacagaaaa aagatttttt ttcaaaaatg 250

tatctatatt aattcctgag aattggaagg aaaatcctca gtacaaaagg 300

ccaaaacatg aaaaccataa acatgctgat gttatagttg caccacctac 350

atccccaggt agagatgaac catacaccaa gcagttcaca gaatgtggag 400

agaaagcgca atacattcac ttcaccctgt accttctact tggaaaaaaa 450

caaaatgaat atggaccacc aggcaaaactg ttgttccatg agtgggctca 500

cctccggtgg ggagtggttg atgagtacaa tgaagatcag cctttctacc 550

gtgctaagtc aaaaaaaatc gaagcaacaa ggtgttcgcg aggtatctct 600

ggtagaataa gagtttataa gtgtcaagga ggcagctgtc ttagtagagc 650

atgcagaatt gattctacaa caaaactgta tggaaaagat tgtcaattct 700

ttctgataa agtacaacaa gaaaagcat ccataatgtt tatgcaaagt 750

attgattctg ttgttgaaat ttgtaacgaa aaaaccata atcaagaagc 800

tccaagccta caaaacataa agtgcaattt tagaagtaca tgggagggtga 850

ttagcaattc tgaggatttt aaaaacacca taccatgggt gacaccacct 900

cctccacctg tcttctcatt gctgaagatc agtcaagaa ttgtgtgctt 950

agttcttgat aagtctggaa gcatgggggg taaggaccgc ctaaatcgaa 1000

tgaatcaagc agcaaaacat ttctgctgc agactgttga aaatggatcc 1050

Sequence Listing - P3230R1C1.txt

tgggtgggga tgggtcactt tgatagtact gccactattg taaataagct 1100
 aatccaaata aaaagcagtg atgaagaaa cacactcatg gcaggattac 1150
 ctacatatcc tctgggagga acttccatct gctctggaat taaatagca 1200
 ttccagggtga ttggagagct acattcccaa ctcgatggat ccgaagtact 1250
 gctgctgact gatggggagg ataactcgc aagttcttgt attgatgaag 1300
 tgaacaaag tggggccatt gttcatttta ttgctttggg aagagctgct 1350
 gatgaagcag taatagagat gagcaagata acaggaggaa gtcattttta 1400
 tgtttcagat gaagctcaga acaatggcct cattgatgt tttggggctc 1450
 ttacatcagg aaatactgat ctctccaga agtccttca gctcgaaagt 1500
 aagggattaa cactgaatag taatgcctgg atgaacgaca ctgcataat 1550
 tgatagtaca gtgggaaagg acacgttctt tctcatcaca tggaacagtc 1600
 tgctctccag tatttctctc tgggatccca gtggaacaat aatggaaaat 1650
 ttcacagtgg atgcaactc caaaatggcc tatctcagta ttccaggaac 1700
 tgcaaaagtg ggcaacttgg catacaatct tcaagcaaaa gcgaaccag 1750
 aaacattaac tattacagta acttctcgag cagcaaattc ttctgtgcct 1800
 ccaatcacag tgaatgctaa aatgaataag gacgtaacaa gtttcccccag 1850
 cccaatgatt gtttacgcag aaattctaca aggatatgta cctgttcttg 1900
 gagccaatgt gactgctttc attgaatcac agaatggaca tacagaagtt 1950
 ttggaacttt tggataatgg tgcaggcgct gattctttca agaatgatgg 2000
 agtctactcc aggtatttta cagcatatac agaaaatggc agatatagct 2050
 taaaagttcg ggctcatgga ggagcaacaa ctgccaggct aaaattacgg 2100
 cctccactga atagagccgc gtacatacca ggctgggtag tgaacgggga 2150
 aattgaagca aaccgcgcaa gacctgaaat tgatgaggat actcagacca 2200
 ccttgaggga tttagccga acagcatccg gaggtgcatt tgtgggatca 2250
 caagtcccaa gccttcctt gcctgaccaa taccaccaa gtcaaatcac 2300
 agaccttgat gccacagttc atgaggataa gattattctt acatggacag 2350
 caccaggaga taattttgat gttgaaaag ttcaacgtta tatcataga 2400
 ataagtgcaa gtattcttga tctaagagac agttttgatg atgctcttca 2450

Sequence Listing - P3230R1C1.txt

agtaaaact actgatctgt caccaaagga ggccaactcc aaggaaagct 2500
 ttgcatttaa accagaaaat atctcagaag aaatgcaac ccacatattt 2550
 attgccatta aaagtataga taaaagcaat ttgacatcaa aagtatccaa 2600
 cattgcacaa gtaactttgt ttatccctca agcaaatcct gatgacattg 2650
 atcctacacc tactcctact cctactccta ctctcgataa aagtcataat 2700
 tctggagtta atattttctac gctggtattg tctgtgattg ggtctgttgt 2750
 aattgttaac tttattttaa gtaccacat ttgaacctta acgaagaaaa 2800
 aaatcttcaa gtgacctag aagagagttt taaaaacaa aacaatgtaa 2850
 gtaaaggata tttctgaatc ttaaaattca tcccatgtgt gatcataaac 2900
 tcataaaaaa aattttaaga tgtcggaaaa ggatactttg attaaataaa 2950
 aacactcatg gatagttaaa aactgtcaag attaaaattt aatagtttca 3000
 tttatttgtt attttatttg taagaaatag tgatgaacaa agatcctttt 3050
 tcatactgat acctggttgt atattatttg atgcaacagt tttctgaaat 3100
 gatattttcaa attgcatcaa gaaattaaaa tcactctatc gagtagtcaa 3150
 aatacaagta aaggagagca aataacaac atttggaata aaaaaaaaaa 3200
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 3250
 aaaaaaaaaa aaaaa 3265

<210> 70

<211> 919

<212> PRT

<213> Homo Sapien

<400> 70

Met Gly Leu Phe Arg Gly Phe Val Phe Leu Leu Val Leu Cys Leu

1 5 10 15

Leu His Gln Ser Asn Thr Ser Phe Ile Lys Leu Asn Asn Asn Gly

20 25 30

Phe Glu Asp Ile Val Ile Val Ile Asp Pro Ser Val Pro Glu Asp

35 40 45

Glu Lys Ile Ile Glu Gln Ile Glu Asp Met Val Thr Thr Ala Ser

50 55 60

Thr Tyr Leu Phe Glu Ala Thr Glu Lys Arg Phe Phe Phe Lys Asn

65 70 75

Sequence Listing - P3230R1C1.txt

Val Ser Ile Leu Ile Pro Glu Asn Trp Lys Glu Asn Pro Gln Tyr
80 85 90

Lys Arg Pro Lys His Glu Asn His Lys His Ala Asp Val Ile Val
95 100 105

Ala Pro Pro Thr Leu Pro Gly Arg Asp Glu Pro Tyr Thr Lys Gln
110 115 120

Phe Thr Glu Cys Gly Glu Lys Gly Glu Tyr Ile His Phe Thr Pro
125 130 135

Asp Leu Leu Leu Gly Lys Lys Gln Asn Glu Tyr Gly Pro Pro Gly
140 145 150

Lys Leu Phe Val His Glu Trp Ala His Leu Arg Trp Gly Val Phe
155 160 165

Asp Glu Tyr Asn Glu Asp Gln Pro Phe Tyr Arg Ala Lys Ser Lys
170 175 180

Lys Ile Glu Ala Thr Arg Cys Ser Ala Gly Ile Ser Gly Arg Asn
185 190 195

Arg Val Tyr Lys Cys Gln Gly Gly Ser Cys Leu Ser Arg Ala Cys
200 205 210

Arg Ile Asp Ser Thr Thr Lys Leu Tyr Gly Lys Asp Cys Gln Phe
215 220 225

Phe Pro Asp Lys Val Gln Thr Glu Lys Ala Ser Ile Met Phe Met
230 235 240

Gln Ser Ile Asp Ser Val Val Glu Phe Cys Asn Glu Lys Thr His
245 250 255

Asn Gln Glu Ala Pro Ser Leu Gln Asn Ile Lys Cys Asn Phe Arg
260 265 270

Ser Thr Trp Glu Val Ile Ser Asn Ser Glu Asp Phe Lys Asn Thr
275 280 285

Ile Pro Met Val Thr Pro Pro Pro Pro Pro Val Phe Ser Leu Leu
290 295 300

Lys Ile Ser Gln Arg Ile Val Cys Leu Val Leu Asp Lys Ser Gly
305 310 315

Ser Met Gly Gly Lys Asp Arg Leu Asn Arg Met Asn Gln Ala Ala
320 325 330

Lys His Phe Leu Leu Gln Thr Val Glu Asn Gly Ser Trp Val Gly
335 340 345

Met Val His Phe Asp Ser Thr Ala Thr Ile Val Asn Lys Leu Ile

Sequence Listing - P3230R1C1.txt

350	355	360
Gln Ile Lys Ser Ser Asp	Glu Arg Asn Thr Leu Met Ala Gly Leu	
365	370	375
Pro Thr Tyr Pro Leu Gly	Gly Thr Ser Ile Cys Ser Gly Ile Lys	
380	385	390
Tyr Ala Phe Gln Val Ile	Gly Glu Leu His Ser Gln Leu Asp Gly	
395	400	405
Ser Glu Val Leu Leu Leu Thr Asp	Gly Glu Asp Asn Thr Ala Ser	
410	415	420
Ser Cys Ile Asp Glu Val Lys Gln Ser Gly Ala Ile Val His Phe		
425	430	435
Ile Ala Leu Gly Arg Ala Ala Asp Glu Ala Val Ile Glu Met Ser		
440	445	450
Lys Ile Thr Gly Gly Ser His Phe Tyr Val Ser Asp Glu Ala Gln		
455	460	465
Asn Asn Gly Leu Ile Asp Ala Phe Gly Ala Leu Thr Ser Gly Asn		
470	475	480
Thr Asp Leu Ser Gln Lys Ser Leu Gln Leu Glu Ser Lys Gly Leu		
485	490	495
Thr Leu Asn Ser Asn Ala Trp Met Asn Asp Thr Val Ile Ile Asp		
500	505	510
Ser Thr Val Gly Lys Asp Thr Phe Phe Leu Ile Thr Trp Asn Ser		
515	520	525
Leu Pro Pro Ser Ile Ser Leu Trp Asp Pro Ser Gly Thr Ile Met		
530	535	540
Glu Asn Phe Thr Val Asp Ala Thr Ser Lys Met Ala Tyr Leu Ser		
545	550	555
Ile Pro Gly Thr Ala Lys Val Gly Thr Trp Ala Tyr Asn Leu Gln		
560	565	570
Ala Lys Ala Asn Pro Glu Thr Leu Thr Ile Thr Val Thr Ser Arg		
575	580	585
Ala Ala Asn Ser Ser Val Pro Pro Ile Thr Val Asn Ala Lys Met		
590	595	600
Asn Lys Asp Val Asn Ser Phe Pro Ser Pro Met Ile Val Tyr Ala		
605	610	615
Glu Ile Leu Gln Gly Tyr Val Pro Val Leu Gly Ala Asn Val Thr		
620	625	630

Sequence Listing - P3230R1C1.txt

Ala Phe Ile Glu Ser Gln Asn Gly His Thr Glu Val Leu Glu Leu
635 640 645

Leu Asp Asn Gly Ala Gly Ala Asp Ser Phe Lys Asn Asp Gly Val
650 655 660

Tyr Ser Arg Tyr Phe Thr Ala Tyr Thr Glu Asn Gly Arg Tyr Ser
665 670 675

Leu Lys Val Arg Ala His Gly Gly Ala Asn Thr Ala Arg Leu Lys
680 685 690

Leu Arg Pro Pro Leu Asn Arg Ala Ala Tyr Ile Pro Gly Trp Val
695 700 705

Val Asn Gly Glu Ile Glu Ala Asn Pro Pro Arg Pro Glu Ile Asp
710 715 720

Glu Asp Thr Gln Thr Thr Leu Glu Asp Phe Ser Arg Thr Ala Ser
725 730 735

Gly Gly Ala Phe Val Val Ser Gln Val Pro Ser Leu Pro Leu Pro
740 745 750

Asp Gln Tyr Pro Pro Ser Gln Ile Thr Asp Leu Asp Ala Thr Val
755 760 765

His Glu Asp Lys Ile Ile Leu Thr Trp Thr Ala Pro Gly Asp Asn
770 775 780

Phe Asp Val Gly Lys Val Gln Arg Tyr Ile Ile Arg Ile Ser Ala
785 790 795

Ser Ile Leu Asp Leu Arg Asp Ser Phe Asp Asp Ala Leu Gln Val
800 805 810

Asn Thr Thr Asp Leu Ser Pro Lys Glu Ala Asn Ser Lys Glu Ser
815 820 825

Phe Ala Phe Lys Pro Glu Asn Ile Ser Glu Glu Asn Ala Thr His
830 835 840

Ile Phe Ile Ala Ile Lys Ser Ile Asp Lys Ser Asn Leu Thr Ser
845 850 855

Lys Val Ser Asn Ile Ala Gln Val Thr Leu Phe Ile Pro Gln Ala
860 865 870

Asn Pro Asp Asp Ile Asp Pro Thr Pro Thr Pro Thr Pro Thr Pro
875 880 885

Thr Pro Asp Lys Ser His Asn Ser Gly Val Asn Ile Ser Thr Leu
890 895 900

Sequence Listing - P3230R1C1.txt

Val Leu Ser Val Ile Gly Ser Val Val Ile Val Asn Phe Ile Leu
905 910 915

Ser Thr Thr Ile

<210> 71

<211> 3877

<212> DNA

<213> Homo Sapien

<400> 71

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ctcgtgtgtg gctgccttc tattcaagg aaagacgcca aggtaattt 150
gaccagagg agcaatgatg tagccacctc ctaaccttc cttctgaac 200
ccccagttat gccaggattt actagagagt gtcaactcaa ccagcaagcg 250
gtctcttcgg cttaacttgt ggttgaggga gagaacctt gtggggctgc 300
gttctcttag cagtgtctag aagtgacttg cctgaggggtg gaccagaaga 350
aaggaaaggt cccctcttgc tgttggtgc acatcaggaa ggctgtgatg 400
ggaatgaagg tgaaaacttg gagattcac ttcagtcatt gcttctgct 450
gcaagatcat cttttaaag tagagaagct gctctgtgtg gtggttaact 500
ccaagaggca gaactcgttc tagaaggaaa tggatgcaag cagctccggg 550
ggccccaac gcattcttc tgttgtctag ccaggggaag cccttcctg 600
ggggcccccg ctttgaggga tgccaccggt tctggacgca tggctgatc 650
ctgaatgatg atggttcgcc gggggctgct tgcgtggatt tccgggttg 700
tgttttctgt ggtgtctctc tgcgtgcta tctctgtct gtacatgtt 750
gcctgcaccc caaaagggtga cgaggagcag ctggcactgc ccagggccaa 800
cagcccccag gggaaggagg ggtaccaggc cgtcttcag gagtgggagg 850
agcagaccg caactacgtg agcagcctga agcggcagat cgcacagctc 900
aaggaggagc tgcaggagag gagtgtgacg ctcaggaatg ggcagtacca 950
agccagcat gctgtctggc tgggtctgga caggagcccc ccagagaaaa 1000
cccaggccga cctctggcc ttctgcact cgcaggtgga caaggcagag 1050
gtgaatgctg gcgtcaagct ggccacagag tatgcagcag tgccttcga 1100

Sequence Listing - P3230R1C1.txt

tagctttact ctacagaagg tgtaccagct ggagactggc cttaccgcc 1150
 accccgagga gaagcctgtg aggaaggaca agcgggatga gttggtggaa 1200
 gccattgaat cagccttgga gaccctgaac aatcctgcag agaacagccc 1250
 caatcaccgt ccttacacgg cctctgattt catagaaggg atctaccgaa 1300
 cagaaaggga caaagggaca ttgtatgagc tcacctcaa agggggaccac 1350
 aaacacgaat tcaaaggct catcttattt cgaccattca gccccatcat 1400
 gaaagtgaat aatgaaaagc tcaacatggc caacacgctt atcaatgtta 1450
 tcgtgcctct agcaaaaagg gtggacaagt tccggcagtt catgcagaat 1500
 ttcagggaga tgtgcattga gcaggatggg agagtcctac tcaactgtgt 1550
 ttactttggg aaagaagaaa taaatgaagt caaaggaata cttgaaaca 1600
 cttccaaagc tgccaacttc aggaacttta cttcatcca gctgaatgga 1650
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 tatccagttc ttttcagta gtacaatcct ggcataatat acggccacca 1850
 tgatgcagtc cctcccttgg aacagcagct ggtcataaag aaggaaactg 1900
 gattttggag agactttgga ttgggatga cgtgtcagta tcggtcagac 1950
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 gaacgaggca tcccacggcc agctgggcat gctgggtgtc aggcacgaga 2200
 tagaggctca ccttcgcaaa cagaaacaga agacaagtag caaaaaaaca 2250
 tgaactccca gagaaggatt gtgggagaca cttttcttt ctttttgcaa 2300
 ttactgaaag tggctgcaac agagaaaaga cttccataaa ggcagacaaa 2350
 agaattggac tgatgggtca gagatgagaa agcctccgat ttctctctgt 2400
 tgggcttttt acaacagaaa tcaaaatctc cgctttgctt gcaaaagtaa 2450
 cccagttgca cctgtgaag tgtctgacaa aggcagaaatg cttgtgagat 2500

Sequence Listing - P3230R1C1.txt

tataagccta atggtgtgga ggttttgatg gtgtttacaa tacactgaga 2550
 cctgttggtt tgtgtgctca ttgaaatatt catgatttaa gaggcagttt 2600
 gtaaaaaatt cattagcatg aaaggcaagc atatttctcc tcatatgaat 2650
 ggcctatca gcagggtctt agtttctagg aatgctaaaa taccagaagg 2700
 caggagagga gataggctta ttatgatact agtgagtaca ttaagtaaaa 2750
 taaaatggac cagaaaagaa aagaaccat aaatatcgtg tcatatttcc 2800
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 agttatagtc tgcttattta attaccactt tgaagcctt acaagagagc 2950
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 atgccaaatg ctgattctgt caggcactga atgtcaggca ttgagacata 3100
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 ttctgcttt acagaaaagg aaactcattc agactggtga tatcgtgatg 3250
 tacctaaaag tcagaaacca cattttctcc tcagaagtag ggaccgcttt 3300
 cttacctgtt taaataaacc aaagtatacc gtgtgaacca aacaatctct 3350
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 ccagaatcta gtgggatgga agtttttgcg acatgttatc caccacaggc 3500
 caggtggaag taactgaatt attttttaaa ttaagcagtt ctactcaatc 3550
 accaagatgc ttctgaaaat tgcattttat taccatttca aactattttt 3600
 taaaaataaa tacagttaac atagagtggg ttcttcattc atgtgaaaaa 3650
 tattagccag caccagatgc atgagctaat tatctcttgg agtccttgct 3700
 tctgtttgct cacagtaaac tcattgttta aaagcttcaa gaacattcaa 3750
 gctgttggtg tgttaaaaaa tgcattgtat tgattgtac tggtagttta 3800
 tgaatttaa taaaacaca ggccatgaat ggaaggtggg attgcacagc 3850

Sequence Listing - P3230R1C1.txt

taataaaata tgatttgagg ataatga 3877

<210> 72

<211> 532

<212> PRT

<213> Homo Sapien

<400> 72

Met Met Met Val Arg Arg Gly Leu Leu Ala Trp Ile Ser Arg Val
1 5 10 15

Val Val Leu Leu Val Leu Leu Cys Cys Ala Ile Ser Val Leu Tyr
20 25 30

Met Leu Ala Cys Thr Pro Lys Gly Asp Glu Glu Gln Leu Ala Leu
35 40 45

Pro Arg Ala Asn Ser Pro Thr Gly Lys Glu Gly Tyr Gln Ala Val
50 55 60

Leu Gln Glu Trp Glu Glu Gln His Arg Asn Tyr Val Ser Ser Leu
65 70 75

Lys Arg Gln Ile Ala Gln Leu Lys Glu Glu Leu Gln Glu Arg Ser
80 85 90

Glu Gln Leu Arg Asn Gly Gln Tyr Gln Ala Ser Asp Ala Ala Gly
95 100 105

Leu Gly Leu Asp Arg Ser Pro Pro Glu Lys Thr Gln Ala Asp Leu
110 115 120

Leu Ala Phe Leu His Ser Gln Val Asp Lys Ala Glu Val Asn Ala
125 130 135

Gly Val Lys Leu Ala Thr Glu Tyr Ala Ala Val Pro Phe Asp Ser
140 145 150

Phe Thr Leu Gln Lys Val Tyr Gln Leu Glu Thr Gly Leu Thr Arg
155 160 165

His Pro Glu Lys Pro Val Arg Lys Asp Lys Arg Asp Glu Leu
170 175 180

Val Glu Ala Ile Glu Ser Ala Leu Glu Thr Leu Asn Asn Pro Ala
185 190 195

Glu Asn Ser Pro Asn His Arg Pro Tyr Thr Ala Ser Asp Phe Ile
200 205 210

Glu Gly Ile Tyr Arg Thr Glu Arg Asp Lys Gly Thr Leu Tyr Glu
215 220 225

Leu Thr Phe Lys Gly Asp His Lys His Glu Phe Lys Arg Leu Ile
230 235 240

Sequence Listing - P3230R1C1.txt

Leu Phe Arg Pro Phe Ser Pro Ile Met Lys Val Lys Asn Glu Lys
 245 250 255
 Leu Asn Met Ala Asn Thr Leu Ile Asn Val Ile Val Pro Leu Ala
 260 265 270
 Lys Arg Val Asp Lys Phe Arg Gln Phe Met Gln Asn Phe Arg Glu
 275 280 285
 Met Cys Ile Glu Gln Asp Gly Arg Val His Leu Thr Val Val Tyr
 290 295 300
 Phe Gly Lys Glu Glu Ile Asn Glu Val Lys Gly Ile Leu Glu Asn
 305 310 315
 Thr Ser Lys Ala Ala Asn Phe Arg Asn Phe Thr Phe Ile Gln Leu
 320 325 330
 Asn Gly Glu Phe Ser Arg Gly Lys Gly Leu Asp Val Gly Ala Arg
 335 340 345
 Phe Trp Lys Gly Ser Asn Val Leu Leu Phe Phe Cys Asp Val Asp
 350 355 360
 Ile Tyr Phe Thr Ser Glu Phe Leu Asn Thr Cys Arg Leu Asn Thr
 365 370 375
 Gln Pro Gly Lys Lys Val Phe Tyr Pro Val Leu Phe Ser Gln Tyr
 380 385 390
 Asn Pro Gly Ile Ile Tyr Gly His His Asp Ala Val Pro Pro Leu
 395 400 405
 Glu Gln Gln Leu Val Ile Lys Lys Glu Thr Gly Phe Trp Arg Asp
 410 415 420
 Phe Gly Phe Gly Met Thr Cys Gln Tyr Arg Ser Asp Phe Ile Asn
 425 430 435
 Ile Gly Gly Phe Asp Leu Asp Ile Lys Gly Trp Gly Gly Glu Asp
 440 445 450
 Val His Leu Tyr Arg Lys Tyr Leu His Ser Asn Leu Ile Val Val
 455 460 465
 Arg Thr Pro Val Arg Gly Leu Phe His Leu Trp His Glu Lys Arg
 470 475 480
 Cys Met Asp Glu Leu Thr Pro Glu Gln Tyr Lys Met Cys Met Gln
 485 490 495
 Ser Lys Ala Met Asn Glu Ala Ser His Gly Gln Leu Gly Met Leu
 500 505 510

Sequence Listing - P3230R1C1.txt

Val Phe Arg His Glu Ile Glu Ala His Leu Arg Lys Gln Lys Gln
515 520 525

Lys Thr Ser Ser Lys Lys Thr
530

<210> 73

<211> 1701

<212> DNA

<213> Homo Sapien

<220>

<221> unsure

<222> 1528

<223> unknown base

<400> 73

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tgctctgggg atccagaaac ccatgatacc ctactgaaca ccgaatcccc 100

tggaagccca cagagacaga gacagcaaga gaagcagaga taaatacatc 150

cacgcaggga gctcgtcgc tctctctctc tctctctcac tctctcctcc 200

ctctctctct gctgtctcta gtctcttagt cctcaaattc ccagtcctct 250

gcaccccttc ctgggacact atgttgttct ccgcctcctt gctggagggt 300

atttgatcc tggctgcaga tgggggtcaa cactggacgt atgagggcc 350

acatggtcag gaccattggc cagctcttta cctgagtggt ggaacaatg 400

cccagtcgcc catcgatatt cagacagaca gtgtgacatt tgacctgat 450

ttgcctgctc tgcagcccca cggatatgac cagcctggca ccgagccttt 500

ggacctgcac aacaatggcc acacagtga actctctctg cctctaccc 550

tgtatctggg tggacttccc cgaaaatag tagctgccca gctccacctg 600

cactggggtc agaaggatc cccagggggg tcagaacacc agatcaacag 650

tgaagccaca ttgcagagc tccacattgt acattatgac tctgattct 700

atgacagctt gagtgaggct gctgagaggc ctcagggcct ggctgtcctg 750

ggcatcctaa ttgaggtggg tgagactaag aatatagctt atgaacacat 800

tctgagtcac ttgcatgaag tcaggcataa agatcagaag acctcagtc 850

ctcccttcaa cctaagagag ctgctcccca aacagctggg cgagtacttc 900

cgctacaatg gctcgtcac aactccccct tgctaccaga gtgtgctctg 950

gacagttttt tatagaaggt cccagatttc aatggaacag ctggaaaagc 1000

Sequence Listing - P3230R1C1.txt

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cagaactacc gagcccttca gcctctcaat cagcgcatgg tctttgcttc 1100
tttcatcaa gcaggatcct cgtataccac aggtgaaatg ctgagctag 1150
gtgtaggaat ctgggttggc tgtctctgcc ttctctggc tgttatttc 1200
attgctagaa agattcgga gaagaggctg gaaaaccgaa agagtgtggt 1250
cttcacctca gcacaagcca cgactgaggc ataaattcct tctcagatac 1300
catggatgtg gatgacttcc ctcatgcct atcaggaagc ctctaaaatg 1350
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ccttcccctg gacatctctt agagaggaat ggaccaggc tgtcatcca 1450
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gaaatcgctg tgttgtaat gcagaganca aactctgttt agttgcaggg 1550
gaagtgtggg atatacccca aagtcctcta cccctcact tttatggccc 1600
ttccctaga tatactcggg gatctctcct taggataaag agttgctgtt 1650
gaagttgtat atttttgatc aatatatttg gaaattaaag tttctgactt 1700
t 1701

<210> 74

<211> 337

<212> PRT

<213> Homo Sapien

<400> 74

Met Leu Phe Ser Ala Leu Leu Leu Glu Val Ile Trp Ile Leu Ala
1 5 10 15

Ala Asp Gly Gly Gln His Trp Thr Tyr Glu Gly Pro His Gly Gln
20 25 30

Asp His Trp Pro Ala Ser Tyr Pro Glu Cys Gly Asn Asn Ala Gln
35 40 45

Ser Pro Ile Asp Ile Gln Thr Asp Ser Val Thr Phe Asp Pro Asp
50 55 60

Leu Pro Ala Leu Gln Pro His Gly Tyr Asp Gln Pro Gly Thr Glu
65 70 75

Pro Leu Asp Leu His Asn Asn Gly His Thr Val Gln Leu Ser Leu
80 85 90

Sequence Listing - P3230R1C1.txt

Pro Ser Thr Leu Tyr Leu Gly Gly Leu Pro Arg Lys Tyr Val Ala
 95 100 105

Ala Gln Leu His Leu His Trp Gly Gln Lys Gly Ser Pro Gly Gly
 110 115 120

Ser Glu His Gln Ile Asn Ser Glu Ala Thr Phe Ala Glu Leu His
 125 130 135

Ile Val His Tyr Asp Ser Asp Ser Tyr Asp Ser Leu Ser Glu Ala
 140 145 150

Ala Glu Arg Pro Gln Gly Leu Ala Val Leu Gly Ile Leu Ile Glu
 155 160 165

Val Gly Glu Thr Lys Asn Ile Ala Tyr Glu His Ile Leu Ser His
 170 175 180

Leu His Glu Val Arg His Lys Asp Gln Lys Thr Ser Val Pro Pro
 185 190 195

Phe Asn Leu Arg Glu Leu Leu Pro Lys Gln Leu Gly Gln Tyr Phe
 200 205 210

Arg Tyr Asn Gly Ser Leu Thr Thr Pro Pro Cys Tyr Gln Ser Val
 215 220 225

Leu Trp Thr Val Phe Tyr Arg Arg Ser Gln Ile Ser Met Glu Gln
 230 235 240

Leu Glu Lys Leu Gln Gly Thr Leu Phe Ser Thr Glu Glu Glu Pro
 245 250 255

Ser Lys Leu Leu Val Gln Asn Tyr Arg Ala Leu Gln Pro Leu Asn
 260 265 270

Gln Arg Met Val Phe Ala Ser Phe Ile Gln Ala Gly Ser Ser Tyr
 275 280 285

Thr Thr Gly Glu Met Leu Ser Leu Gly Val Gly Ile Leu Val Gly
 290 295 300

Cys Leu Cys Leu Leu Leu Ala Val Tyr Phe Ile Ala Arg Lys Ile
 305 310 315

Arg Lys Lys Arg Leu Glu Asn Arg Lys Ser Val Val Phe Thr Ser
 320 325 330

Ala Gln Ala Thr Thr Glu Ala
 335

<210> 75

<211> 1743

<212> DNA

<213> Homo Sapien

Sequence Listing - P3230R1C1.txt

<400> 75

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tccatctacc gatatatcca cgttggcaaa gagaaacacc cagcaaat 650
gattttgatt tatggaaatg aatttgacaa aagattcttt gtgcctgctg 700
aaaaaatcgt gattaacttt atcacctca atctctcga tgattctaaa 750
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agccttctga gggggatggg ctcggagagg agggcttctt atctagactc 1350

Sequence Listing - P3230R1C1.txt

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catgcaattc atggaggaat ggggggtata tgtgcagatg gaaaactgat 1450

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cctttgatcc cagccataaa gtacctggga tgaagaagt ttttccagt 1550

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aaatgtttgc cagactgggt gcagaattta ttcagtgagg tgt 1743

<210> 76

<211> 442

<212> PRT

<213> Homo Sapien

<400> 76

Met Ser Tyr Asn Gly Leu His Gln Arg Val Phe Lys Glu Leu Lys
1 5 10 15

Leu Leu Thr Leu Cys Ser Ile Ser Ser Gln Ile Gly Pro Pro Glu
20 25 30

Val Ala Leu Thr Thr Asp Glu Lys Ser Ile Ser Val Val Leu Thr
35 40 45

Ala Pro Glu Lys Trp Lys Arg Asn Pro Glu Asp Leu Pro Val Ser
50 55 60

Met Gln Gln Ile Tyr Ser Asn Leu Lys Tyr Asn Val Ser Val Leu
65 70 75

Asn Thr Lys Ser Asn Arg Thr Trp Ser Gln Cys Val Thr Asn His
80 85 90

Thr Leu Val Leu Thr Trp Leu Glu Pro Asn Thr Leu Tyr Cys Val
95 100 105

His Val Glu Ser Phe Val Pro Gly Pro Pro Arg Arg Ala Gln Pro
110 115 120

Ser Glu Lys Gln Cys Ala Arg Thr Leu Lys Asp Gln Ser Ser Glu
125 130 135

Phe Lys Ala Lys Ile Ile Phe Trp Tyr Val Leu Pro Ile Ser Ile
140 145 150

Thr Val Phe Leu Phe Ser Val Met Gly Tyr Ser Ile Tyr Arg Tyr
155 160 165

Ile His Val Gly Lys Glu Lys His Pro Ala Asn Leu Ile Leu Ile

Sequence Listing - P3230R1C1.txt

170	175	180
Tyr Gly Asn Glu Phe Asp Lys Arg Phe Phe Val Pro Ala Glu Lys		
185	190	195
Ile Val Ile Asn Phe Ile Thr Leu Asn Ile Ser Asp Asp Ser Lys		
200	205	210
Ile Ser His Gln Asp Met Ser Leu Leu Gly Lys Ser Ser Asp Val		
215	220	225
Ser Ser Leu Asn Asp Pro Gln Pro Ser Gly Asn Leu Arg Pro Pro		
230	235	240
Gln Glu Glu Glu Glu Val Lys His Leu Gly Tyr Ala Ser His Leu		
245	250	255
Met Glu Ile Phe Cys Asp Ser Glu Glu Asn Thr Glu Gly Thr Ser		
260	265	270
Leu Thr Gln Gln Glu Ser Leu Ser Arg Thr Ile Pro Pro Asp Lys		
275	280	285
Thr Val Ile Glu Tyr Glu Tyr Asp Val Arg Thr Thr Asp Ile Cys		
290	295	300
Ala Gly Pro Glu Glu Gln Glu Leu Ser Leu Gln Glu Glu Val Ser		
305	310	315
Thr Gln Gly Thr Leu Leu Glu Ser Gln Ala Ala Leu Ala Val Leu		
320	325	330
Gly Pro Gln Thr Leu Gln Tyr Ser Tyr Thr Pro Gln Leu Gln Asp		
335	340	345
Leu Asp Pro Leu Ala Gln Glu His Thr Asp Ser Glu Glu Gly Pro		
350	355	360
Glu Glu Glu Pro Ser Thr Thr Leu Val Asp Trp Asp Pro Gln Thr		
365	370	375
Gly Arg Leu Cys Ile Pro Ser Leu Ser Ser Phe Asp Gln Asp Ser		
380	385	390
Glu Gly Cys Glu Pro Ser Glu Gly Asp Gly Leu Gly Glu Glu Gly		
395	400	405
Leu Leu Ser Arg Leu Tyr Glu Glu Pro Ala Pro Asp Arg Pro Pro		
410	415	420
Gly Glu Asn Glu Thr Tyr Leu Met Gln Phe Met Glu Glu Trp Gly		
425	430	435
Leu Tyr Val Gln Met Glu Asn		
440		

Sequence Listing - P3230R1C1.txt

<210> 77

<211> 1636

<212> DNA

<213> Homo Sapien

<400> 77

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tgcagttctc atcctcgcc caaagtcac caagaaaag ctgacacag 200
agctgaagga ccacaagcc accagatcc tgcagcagc gccgtgctc 250
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caacatcccg ttcagctca tctgtagtca ggacgtgggt aaagctgcag 950
tggtgctgt gctcttcca gaagaattca tggctctgt ggactctgt 1000
cttctgaga gtgcccatc gctgaagtca agcatcgggc tgatcaatga 1050
aaaggctgca gataagctgg gatctaccca gatcgtgaag atcctaactc 1100
aggacactcc cgagttttt atagaccaag gccatgcaa ggtggcccaa 1150
ctgatctgc tggaaagtgt tccctcagt gaagccctcc gccctttgtt 1200
caccctgggc atcgaagcca gctcggaagc tcagttttac accaaagggt 1250

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Sequence Listing - P3230R1C1.txt

accaacttat actcaacttg aataacatca gctctgatcg gatccagctg 1300
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 cactgagatc atccactcca tctgctgcc gaaccagaat ggcaaattaa 1400
 gatctggggg cccagtgtca ttggtgaagg ccttgggatt cgaggcagct 1450
 gagtctctac tgaccaagga tgcccttggt cttactccag cctccttggt 1500
 gaaaccagc tctctgtct cccagtgaag acttgatgag cagccatcag 1550
 ggaaggctgg gtcccagctg ggagtatggg tgtgagctct atagaccatc 1600
 cctctctgca atcaataaac acttgctgtt gaaaaa 1636

<210> 78

<211> 484

<212> PRT

<213> Homo Sapien

<400> 78

Met Ala Gly Pro Trp Thr Phe Thr Leu Leu Cys Gly Leu Leu Ala
 1 5 10 15

Ala Thr Leu Ile Gln Ala Thr Leu Ser Pro Thr Ala Val Leu Ile
 20 25 30

Leu Gly Pro Lys Val Ile Lys Glu Lys Leu Thr Gln Glu Leu Lys
 35 40 45

Asp His Asn Ala Thr Ser Ile Leu Gln Gln Leu Pro Leu Leu Ser
 50 55 60

Ala Met Arg Glu Lys Pro Ala Gly Gly Ile Pro Val Leu Gly Ser
 65 70 75

Leu Val Asn Thr Val Leu Lys His Ile Ile Trp Leu Lys Val Ile
 80 85 90

Thr Ala Asn Ile Leu Gln Leu Gln Val Lys Pro Ser Ala Asn Asp
 95 100 105

Gln Glu Leu Leu Val Lys Ile Pro Leu Asp Met Val Ala Gly Phe
 110 115 120

Asn Thr Pro Leu Val Lys Thr Ile Val Glu Phe His Met Thr Thr
 125 130 135

Glu Ala Gln Ala Thr Ile Arg Met Asp Thr Ser Ala Ser Gly Pro
 140 145 150

Thr Arg Leu Val Leu Ser Asp Cys Ala Thr Ser His Gly Ser Leu
 155 160 165

Sequence Listing - P3230R1C1.txt

Arg Ile Gln Leu Leu Tyr Lys Leu Ser Phe Leu Val Asn Ala Leu
170 175 180

Ala Lys Gln Val Met Asn Leu Leu Val Pro Ser Leu Pro Asn Leu
185 190 195

Val Lys Asn Gln Leu Cys Pro Val Ile Glu Ala Ser Phe Asn Gly
200 205 210

Met Tyr Ala Asp Leu Leu Gln Leu Val Lys Val Pro Ile Ser Leu
215 220 225

Ser Ile Asp Arg Leu Glu Phe Asp Leu Leu Tyr Pro Ala Ile Lys
230 235 240

Gly Asp Thr Ile Gln Leu Tyr Leu Gly Ala Lys Leu Leu Asp Ser
245 250 255

Gln Gly Lys Val Thr Lys Trp Phe Asn Asn Ser Ala Ala Ser Leu
260 265 270

Thr Met Pro Thr Leu Asp Asn Ile Pro Phe Ser Leu Ile Val Ser
275 280 285

Gln Asp Val Val Lys Ala Ala Val Ala Ala Val Leu Ser Pro Glu
290 295 300

Glu Phe Met Val Leu Leu Asp Ser Val Leu Pro Glu Ser Ala His
305 310 315

Arg Leu Lys Ser Ser Ile Gly Leu Ile Asn Glu Lys Ala Ala Asp
320 325 330

Lys Leu Gly Ser Thr Gln Ile Val Lys Ile Leu Thr Gln Asp Thr
335 340 345

Pro Glu Phe Phe Ile Asp Gln Gly His Ala Lys Val Ala Gln Leu
350 355 360

Ile Val Leu Glu Val Phe Pro Ser Ser Glu Ala Leu Arg Pro Leu
365 370 375

Phe Thr Leu Gly Ile Glu Ala Ser Ser Glu Ala Gln Phe Tyr Thr
380 385 390

Lys Gly Asp Gln Leu Ile Leu Asn Leu Asn Asn Ile Ser Ser Asp
395 400 405

Arg Ile Gln Leu Met Asn Ser Gly Ile Gly Trp Phe Gln Pro Asp
410 415 420

Val Leu Lys Asn Ile Ile Thr Glu Ile Ile His Ser Ile Leu Leu
425 430 435

Sequence Listing - P3230R1C1.txt

Pro Asn Gln Asn Gly Lys Leu Arg Ser Gly Val Pro Val Ser Leu
440 445 450

Val Lys Ala Leu Gly Phe Glu Ala Ala Glu Ser Ser Leu Thr Lys
455 460 465

Asp Ala Leu Val Leu Thr Pro Ala Ser Leu Trp Lys Pro Ser Ser
470 475 480

Pro Val Ser Gln

<210> 79

<211> 1475

<212> DNA

<213> Homo Sapien

<400> 79

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gcttctactg agagggtcgc catggcctct ctggcctcc aactgtggg 150
ctacatccta ggccttctgg ggcttttggg cacactgggt gccatgctgc 200
tccccagctg gaaaacaagt tcttatgtcg gtgccagcat tgtgacagca 250
gttggttct ccaagggcct ctggatggaa tgtgccacac acagcacagg 300
catcaccagc tgtgacatct atagaccct tctgggctg cccgctgaca 350
tccaggctgc ccaggccatg atggtgacat ccagtgaat ctctccctg 400
gcctgcatta tctctgtggt ggcatgaga tgcacagtct tctgccagga 450
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ttggaggcct cctgggattc attctgttg cctggaatct tcatgggac 550
ctacgggact tctactacc actggtgcct gacagcatga aatttgagat 600
tggagaggct cttacttg gcatatttc ttcctgttc tccctgatg 650
ctggaatcat cctctgctt tctgtctat cccagagaaa tcgtccaac 700
tactacgatg cctaccaagc ccaacctctt gccacaagga gctctcaag 750
gcttggtcaa cctccaaag tcaagagtga gttcaattc tacagcctga 800
cagggtatgt gtgaagaacc aggggccaga gctggggggg ggctggggt 850
gtgaaaaaca gtggacagca cccgagggc cacaggtgag ggacactacc 900
actggatcgt gtcagaaggt gctgctgagg atagactgac tttggccatt 950

Sequence Listing - P3230R1C1.txt

ggattgagca aaggcagaaa tgggggctag tgtaacagca tgcaggttga 1000
 attgccaagg atgtctgcca tgccagcctt tctgttttcc tcacctgtct 1050
 gctccccctgc cctaagtccc caaccctcaa ctgaaaccc cattccctta 1100
 agccaggact cagaggatcc ctttgcctc tggtttacct gggactccat 1150
 ccccaaacc actaatcaca tccactgac tgaccctctg tgatcaaga 1200
 ccctctctct ggctgagggt ggctcttagc tcattgctgg ggatgggaag 1250
 gagaagcagt ggcttttctg ggcattgctc taacctactt ctaagcttc 1300
 ctcctcaaga aactgattgg ccttgaacc tccatccac tctgttatg 1350
 actccacagt gtccagacta atttgtgcat gaactgaaat aaaaccatcc 1400
 tagggtatcc agggaacaga aagcaggatg caggatggga ggacaggaag 1450
 gcagcctggg acatttaaaa aaata 1475

<210> 80

<211> 230

<212> PRT

<213> Homo Sapien

<400> 80

Met Ala Ser Leu Gly Leu Gln Leu Val Gly Tyr Ile Leu Gly Leu
 1 5 10 15

Leu Gly Leu Leu Gly Thr Leu Val Ala Met Leu Leu Pro Ser Trp
 20 25 30

Lys Thr Ser Ser Tyr Val Gly Ala Ser Ile Val Thr Ala Val Gly
 35 40 45

Phe Ser Lys Gly Leu Trp Met Glu Cys Ala Thr His Ser Thr Gly
 50 55 60

Ile Thr Gln Cys Asp Ile Tyr Ser Thr Leu Leu Gly Leu Pro Ala
 65 70 75

Asp Ile Gln Ala Ala Gln Ala Met Met Val Thr Ser Ser Ala Ile
 80 85 90

Ser Ser Leu Ala Cys Ile Ile Ser Val Val Gly Met Arg Cys Thr
 95 100 105

Val Phe Cys Gln Glu Ser Arg Ala Lys Asp Arg Val Ala Val Ala
 110 115 120

Gly Gly Val Phe Phe Ile Leu Gly Gly Leu Leu Gly Phe Ile Pro
 125 130 135

Sequence Listing - P3230R1C1.txt

Val Ala Trp Asn Leu His Gly Ile Leu Arg Asp Phe Tyr Ser Pro
140 145 150

Leu Val Pro Asp Ser Met Lys Phe Glu Ile Gly Glu Ala Leu Tyr
155 160 165

Leu Gly Ile Ile Ser Ser Leu Phe Ser Leu Ile Ala Gly Ile Ile
170 175 180

Leu Cys Phe Ser Cys Ser Ser Gln Arg Asn Arg Ser Asn Tyr Tyr
185 190 195

Asp Ala Tyr Gln Ala Gln Pro Leu Ala Thr Arg Ser Ser Pro Arg
200 205 210

Pro Gly Gln Pro Pro Lys Val Lys Ser Glu Phe Asn Ser Tyr Ser
215 220 225

Leu Thr Gly Tyr Val
230

<210> 81

<211> 1732

<212> DNA

<213> Homo Sapien

<400> 81

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cttagacctc cttctctgcc ctctttctt gccaccgct gttctctggc 150

ccttctccga ccccgctcta gcagcagacc tctgggggtc tgggggtga 200

tctgtggccc ctgtgcctcc gtgtctttt cgtctccctt cctcccgact 250

ccgctcccg accagcgcc tgacctggg gaaaggatgg ttcccgaggt 300

gagggtctc tctctctgc tgggactgc gctgctctgg ttccccctgg 350

actcccacgc tcgagccgc ccagacatgt tctgcctttt ccatgggaag 400

agatactccc ccggcgagag ctggcacccc tacttggagc cacaaggcct 450

gatgtactgc ctgcgtgta cctgctcaga gggcgcccat gtgagttgtt 500

accgcctcca ctgtcgcct gtccactgcc cccagcctgt gacggagcca 550

cagcaatgct gtccaagtg tgtggaacct cacactcct ctggactccg 600

ggccccacca aagtctgcc agcacaacgg gacctgtac caacaggag 650

agatcttcag tgcccatgag ctgttccct cccgctgcc caaccagtgt 700

gtctctgca gctgcacaga gggccagatc tactgaggcc tcacaactgt 750

Sequence Listing - P3230R1C1.txt

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 aagcctgcaa agatgaggca agtgagcaat cggaatgaaga ggacagtgtg 850
 cagtcgtctc atgggggtgag acatctcag gatccatgtt ccagtgtatgc 900
 tgggagaag agaggcccgg gcaccccagc cccactggc ctacgcgcc 950
 ctctgagctt catcctctgc cacttcagac ccaagggagc aggcagcaca 1000
 actgtcaaga tcgtctgaa ggagaacat aagaagcct gtgtgcatgg 1050
 cgggaagacg tactccacg gggagggtgtg gcacccggcc ttccgtgcct 1100
 tcggccctt gccctgcatc ctatgcacct gtgaggatgg ccgccaggac 1150
 tgccagcgtg tgacctgtcc caccgagtac ccctgccgtc accccgagaa 1200
 agtggtgtgg aagtgtgca agatttgccc agaggacaaa gcagaccctg 1250
 gccacagtga gatcagttct accaggtgtc ccaaggcacc gggccgggtc 1300
 ctctgccaca catcgttatc cccaagccca gacaactgc gtgcgtttgc 1350
 cctggaacac gaggcctcgg acttggtgga gatctacctc tggaagtgtg 1400
 taaaagatga ggaactgtg gctcagagag gtgaagtacc tggccaagg 1450
 ccacacagcc agaattctcc acttgactca gatcaagaaa gtcagggaagc 1500
 aagacttcca gaaagaggca cagcacttcc gactgtctgc tggeccccac 1550
 gaaggtcact ggaacgtctt cctagcccag accctggagc tgaaggtcac 1600
 ggcaggtcca gacaagtga ccaagacata acaagacct aacagttgca 1650
 gatatgagct gtataattgt tgttattata tattaataaa taagaagttg 1700
 cattaccctc aaaaaaaaaa aaaaaaaaaa aa 1732

<210> 82

<211> 451

<212> PRT

<213> Homo Sapien

<400> 82

Met	Val	Pro	Glu	Val	Arg	Val	Leu	Ser	Ser	Leu	Leu	Gly	Leu	Ala
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Leu	Leu	Trp	Phe	Pro	Leu	Asp	Ser	His	Ala	Arg	Ala	Arg	Pro	Asp
		20				25				30				

Met	Phe	Cys	Leu	Phe	His	Gly	Lys	Arg	Tyr	Ser	Pro	Gly	Glu	Ser
		35				40						45		

Sequence Listing - P3230R1C1.txt

Trp His Pro Tyr Leu Glu Pro Gln Gly Leu Met Tyr Cys Leu Arg
50 55 60

Cys Thr Cys Ser Glu Gly Ala His Val Ser Cys Tyr Arg Leu His
65 70 75

Cys Pro Pro Val His Cys Pro Gln Pro Val Thr Glu Pro Gln Gln
80 85 90

Cys Cys Pro Lys Cys Val Glu Pro His Thr Pro Ser Gly Leu Arg
95 100 105

Ala Pro Pro Lys Ser Cys Gln His Asn Gly Thr Met Tyr Gln His
110 115 120

Gly Glu Ile Phe Ser Ala His Glu Leu Phe Pro Ser Arg Leu Pro
125 130 135

Asn Gln Cys Val Leu Cys Ser Cys Thr Glu Gly Gln Ile Tyr Cys
140 145 150

Gly Leu Thr Thr Cys Pro Glu Pro Gly Cys Pro Ala Pro Leu Pro
155 160 165

Leu Pro Asp Ser Cys Cys Gln Ala Cys Lys Asp Glu Ala Ser Glu
170 175 180

Gln Ser Asp Glu Glu Asp Ser Val Gln Ser Leu His Gly Val Arg
185 190 195

His Pro Gln Asp Pro Cys Ser Ser Asp Ala Gly Arg Lys Arg Gly
200 205 210

Pro Gly Thr Pro Ala Pro Thr Gly Leu Ser Ala Pro Leu Ser Phe
215 220 225

Ile Pro Arg His Phe Arg Pro Lys Gly Ala Gly Ser Thr Thr Val
230 235 240

Lys Ile Val Leu Lys Glu Lys His Lys Lys Ala Cys Val His Gly
245 250 255

Gly Lys Thr Tyr Ser His Gly Glu Val Trp His Pro Ala Phe Arg
260 265 270

Ala Phe Gly Pro Leu Pro Cys Ile Leu Cys Thr Cys Glu Asp Gly
275 280 285

Arg Gln Asp Cys Gln Arg Val Thr Cys Pro Thr Glu Tyr Pro Cys
290 295 300

Arg His Pro Glu Lys Val Ala Gly Lys Cys Cys Lys Ile Cys Pro
305 310 315

Glu Asp Lys Ala Asp Pro Gly His Ser Glu Ile Ser Ser Thr Arg

Sequence Listing - P3230R1C1.txt

320	325	330
Cys Pro Lys Ala Pro Gly Arg Val Leu Val His Thr Ser Val Ser		
335	340	345
Pro Ser Pro Asp Asn Leu Arg Arg Phe Ala Leu Glu His Glu Ala		
350	355	360
Ser Asp Leu Val Glu Ile Tyr Leu Trp Lys Leu Val Lys Asp Glu		
365	370	375
Glu Thr Glu Ala Gln Arg Gly Glu Val Pro Gly Pro Arg Pro His		
380	385	390
Ser Gln Asn Leu Pro Leu Asp Ser Asp Gln Glu Ser Gln Glu Ala		
395	400	405
Arg Leu Pro Glu Arg Gly Thr Ala Leu Pro Thr Ala Arg Trp Pro		
410	415	420
Pro Arg Arg Ser Leu Glu Arg Leu Pro Ser Pro Asp Pro Gly Ala		
425	430	435
Glu Gly His Gly Gln Ser Arg Gln Ser Asp Gln Asp Ile Thr Lys		
440	445	450

Thr

<210> 83

<211> 2052

<212> DNA

<213> Homo Sapien

<400> 83

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 gttctctct tctctctaat ccattcgtca cctctctgt catcgtttc 150
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 gccagacaag cctgtccagg ccttggtggg ggaggacgca gcattctct 300
 gtttctctgc tcctaagacc aatgcagagg ccatggaagt gcggtttctc 350
 agggggccagt tctctagcgt ggtccacctc tacagggacg ggaaggacca 400
 gccatttatg catatgccac agtatcaagg caggacaaaa ctggtgaagg 450
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Sequence Listing - P3230R1C1.txt

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 gaaggccatc tgggagctac aggtgtcagc actgggctca gttcctctca 600
 ttccatcac gggatatgtt gatagagaca tccagtact ctgtcagttc 650
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 aaagcagga caggcagaat tgagagacgc ccggaaacac gcagtggagg 1050
 tgactctgga tccagagacg gctcaccga agctctgctg ttctgatctg 1100
 aaaactgtaa cccatagaaa agctccccag gaggtgcctc actctagaaa 1150
 gagatttaca aggaagagtg tgggtgcttc tcagagtttc caagcaggga 1200
 aacattactg ggaggtggac ggaggacaca ataaaagggt gcgctgggga 1250
 gtgtgccggg atgatgtgga caggaggaag gagtacgtga cttgtctcc 1300
 cgtatctggg tactgggtcc tcagactgaa tggagaacat ttgtatttca 1350
 cattaaatcc ccgttttacc agcgtcttcc ccaggacccc acctacaaaa 1400
 ataggggtct tcctggacta tgagtgtggg accatctcct tcttaacat 1450
 aaatgaccag tccctatttt ataccctgac atgtcggttt gaaggcttat 1500
 tgaggcccta cattgagtat ccgtctata atgagcaaaa tggaaactccc 1550
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 aagggcctct gcaatcccag agacaagcaa cagttagtcc tctcacagg 1650
 caaccacgcc ctctctccc aggggtgaaa ttaggatga atcacatccc 1700
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 cagcagccgg ccaaggtggc ttccagatga agggggactg gcctgtccac 1800
 atgggagtca ggtgtcatgg ctgccctgag ctgggaggga agaaggctga 1850
 cattacattt agtttgcct cactccatct ggctaagtga tcttgaaata 1900

Sequence Listing - P3230R1C1.txt

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tgtagattaa gtagacaagg aatgtgaata atgcttagat cttattgatg 2000

acagagtgtg tcctaattggt ttgttcatta tattacactt tcagtaaaaa 2050

aa 2052

<210> 84

<211> 500

<212> PRT

<213> Homo Sapien

<400> 84

Met Ala Leu Met Leu Ser Leu Val Leu Ser Leu Leu Lys Leu Gly
1 5 10 15

Ser Gly Gln Trp Gln Val Phe Gly Pro Asp Lys Pro Val Gln Ala
20 25 30

Leu Val Gly Glu Asp Ala Ala Phe Ser Cys Phe Leu Ser Pro Lys
35 40 45

Thr Asn Ala Glu Ala Met Glu Val Arg Phe Phe Arg Gly Gln Phe
50 55 60

Ser Ser Val Val His Leu Tyr Arg Asp Gly Lys Asp Gln Pro Phe
65 70 75

Met Gln Met Pro Gln Tyr Gln Gly Arg Thr Lys Leu Val Lys Asp
80 85 90

Ser Ile Ala Glu Gly Arg Ile Ser Leu Arg Leu Glu Asn Ile Thr
95 100 105

Val Leu Asp Ala Gly Leu Tyr Gly Cys Arg Ile Ser Ser Gln Ser
110 115 120

Tyr Tyr Gln Lys Ala Ile Trp Glu Leu Gln Val Ser Ala Leu Gly
125 130 135

Ser Val Pro Leu Ile Ser Ile Thr Gly Tyr Val Asp Arg Asp Ile
140 145 150

Gln Leu Leu Cys Gln Ser Ser Gly Trp Phe Pro Arg Pro Thr Ala
155 160 165

Lys Trp Lys Gly Pro Gln Gly Gln Asp Leu Ser Thr Asp Ser Arg
170 175 180

Thr Asn Arg Asp Met His Gly Leu Phe Asp Val Glu Ile Ser Leu
185 190 195

Thr Val Gln Glu Asn Ala Gly Ser Ile Ser Cys Ser Met Arg His
200 205 210

Sequence Listing - P3230R1C1.txt

Ala His Leu Ser Arg Glu Val Glu Ser Arg Val Gln Ile Gly Asp
 215 220 225

Thr Phe Phe Glu Pro Ile Ser Trp His Leu Ala Thr Lys Val Leu
 230 235 240

Gly Ile Leu Cys Cys Gly Leu Phe Phe Gly Ile Val Gly Leu Lys
 245 250 255

Ile Phe Phe Ser Lys Phe Gln Trp Lys Ile Gln Ala Glu Leu Asp
 260 265 270

Trp Arg Arg Lys His Gly Gln Ala Glu Leu Arg Asp Ala Arg Lys
 275 280 285

His Ala Val Glu Val Thr Leu Asp Pro Glu Thr Ala His Pro Lys
 290 295 300

Leu Cys Val Ser Asp Leu Lys Thr Val Thr His Arg Lys Ala Pro
 305 310 315

Gln Glu Val Pro His Ser Glu Lys Arg Phe Thr Arg Lys Ser Val
 320 325 330

Val Ala Ser Gln Ser Phe Gln Ala Gly Lys His Tyr Trp Glu Val
 335 340 345

Asp Gly Gly His Asn Lys Arg Trp Arg Val Gly Val Cys Arg Asp
 350 355 360

Asp Val Asp Arg Arg Lys Glu Tyr Val Thr Leu Ser Pro Asp His
 365 370 375

Gly Tyr Trp Val Leu Arg Leu Asn Gly Glu His Leu Tyr Phe Thr
 380 385 390

Leu Asn Pro Arg Phe Ile Ser Val Phe Pro Arg Thr Pro Pro Thr
 395 400 405

Lys Ile Gly Val Phe Leu Asp Tyr Glu Cys Gly Thr Ile Ser Phe
 410 415 420

Phe Asn Ile Asn Asp Gln Ser Leu Ile Tyr Thr Leu Thr Cys Arg
 425 430 435

Phe Glu Gly Leu Leu Arg Pro Tyr Ile Glu Tyr Pro Ser Tyr Asn
 440 445 450

Gln Gln Asn Gly Thr Pro Ile Val Ile Cys Pro Val Thr Gln Glu
 455 460 465

Ser Glu Lys Glu Ala Ser Trp Gln Arg Ala Ser Ala Ile Pro Glu
 470 475 480

Sequence Listing - P3230R1C1.txt

Thr Ser Asn Ser Glu Ser Ser Ser Gln Ala Thr Thr Pro Phe Leu
485 490 495

Pro Arg Gly Glu Met
500

<210> 85

<211> 1665

<212> DNA

<213> Homo Sapien

<400> 85

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gtaaactgct gacgatgcag agttccgtga cggtcagga aggcctgtgt 150
gtccatgtgc cctgctcctt ctctacccc tcgcatggct ggatttacc 200
tggccagta gttcatggct actggttcg ggaaggggcc aatacagacc 250
aggatgctcc agtggccaca aacaaccag ctcgggcagt gtgggaggag 300
actcgggacc gattccacct ccttggggac ccacatacca agaattgcac 350
cctgagcatc agagatgcca gaagaagtga tgcggggaga tactttctc 400
gtatggagaa aggaagtata aaatggaatt ataacatca ccggctctct 450
gtgaatgtga cagccttgac ccacaggccc aacatctca tccaggcac 500
cctggagtcc ggcctgcccc agaattgcac ctgctctgtg cctgggcct 550
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gccccaggac catggcacca gctcacctg tcaggtgacc ttccctggg 700
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ctgcagagca aagccacatc aggagtgact caggggggtg tcgggggagc 1100

Sequence Listing - P3230R1C1.txt

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 acgggcatag aggatgcaaa cgctgtcagg ggttcagcct ctacggggcc 1250
 cctgactgaa ctttgggcag aagacagtcc cccagaccag cctccccag 1300
 ctttcgccg ctctcagtg ggggaaggag agctccagta tgcacccctc 1350
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 accctgattg agggatcaca gccctccag gcaagggaga agtcagaggc 1500
 tgattcttgt agaattaaca gccctcaacg tgatgagcta tgataacact 1550
 atgaattatg tgcagagtga aaagcacaca ggcttagag tcaaagtatc 1600
 tcaaacctga atccacactg tgccctccct tttattttt taactaaaag 1650
 acagacaaat tccta 1665

<210> 86

<211> 463

<212> PRT

<213> Homo Sapien

<400> 86

Met Leu Leu Leu Leu Pro Leu Leu Trp Gly Arg Glu Arg Ala
 1 5 10 15

Glu Gly Gln Thr Ser Lys Leu Leu Thr Met Gln Ser Ser Val Thr
 20 25 30

Val Gln Glu Gly Leu Cys Val His Val Pro Cys Ser Phe Ser Tyr
 35 40 45

Pro Ser His Gly Trp Ile Tyr Pro Gly Pro Val Val His Gly Tyr
 50 55 60

Trp Phe Arg Glu Gly Ala Asn Thr Asp Gln Asp Ala Pro Val Ala
 65 70 75

Thr Asn Asn Pro Ala Arg Ala Val Trp Glu Glu Thr Arg Asp Arg
 80 85 90

Phe His Leu Leu Gly Asp Pro His Thr Lys Asn Cys Thr Leu Ser
 95 100 105

Ile Arg Asp Ala Arg Arg Ser Asp Ala Gly Arg Tyr Phe Phe Arg
 110 115 120

Met Glu Lys Gly Ser Ile Lys Trp Asn Tyr Lys His His Arg Leu

Sequence Listing - P3230R1C1.txt

125	130	135
Ser Val Asn Val Thr Ala	Leu Thr His Arg Pro Asn Ile Leu Ile	
140	145	150
Pro Gly Thr Leu Glu Ser	Gly Cys Pro Gln Asn Leu Thr Cys Ser	
155	160	165
Val Pro Trp Ala Cys Glu Gln Gly Thr Pro Pro Met Ile Ser Trp		
170	175	180
Ile Gly Thr Ser Val Ser Pro Leu Asp Pro Ser Thr Thr Arg Ser		
185	190	195
Ser Val Leu Thr Leu Ile Pro Gln Pro Gln Asp His Gly Thr Ser		
200	205	210
Leu Thr Cys Gln Val Thr Phe Pro Gly Ala Ser Val Thr Thr Asn		
215	220	225
Lys Thr Val His Leu Asn Val Ser Tyr Pro Pro Gln Asn Leu Thr		
230	235	240
Met Thr Val Phe Gln Gly Asp Gly Thr Val Ser Thr Val Leu Gly		
245	250	255
Asn Gly Ser Ser Leu Ser Leu Pro Glu Gly Gln Ser Leu Arg Leu		
260	265	270
Val Cys Ala Val Asp Ala Val Asp Ser Asn Pro Pro Ala Arg Leu		
275	280	285
Ser Leu Ser Trp Arg Gly Leu Thr Leu Cys Pro Ser Gln Pro Ser		
290	295	300
Asn Pro Gly Val Leu Glu Leu Pro Trp Val His Leu Arg Asp Ala		
305	310	315
Ala Glu Phe Thr Cys Arg Ala Gln Asn Pro Leu Gly Ser Gln Gln		
320	325	330
Val Tyr Leu Asn Val Ser Leu Gln Ser Lys Ala Thr Ser Gly Val		
335	340	345
Thr Gln Gly Val Val Gly Gly Ala Gly Ala Thr Ala Leu Val Phe		
350	355	360
Leu Ser Phe Cys Val Ile Phe Val Val Val Arg Ser Cys Arg Lys		
365	370	375
Lys Ser Ala Arg Pro Ala Ala Gly Val Gly Asp Thr Gly Ile Glu		
380	385	390
Asp Ala Asn Ala Val Arg Gly Ser Ala Ser Gln Gly Pro Leu Thr		
395	400	405

Sequence Listing - P3230R1C1.txt

Glu Pro Trp Ala Glu Asp Ser Pro Pro Asp Gln Pro Pro Pro Ala
410 415 420

Ser Ala Arg Ser Ser Val Gly Glu Gly Glu Leu Gln Tyr Ala Ser
425 430 435

Leu Ser Phe Gln Met Val Lys Pro Trp Asp Ser Arg Gly Gln Glu
440 445 450

Ala Thr Asp Thr Glu Tyr Ser Glu Ile Lys Ile His Arg
455 460

<210> 87

<211> 1176

<212> DNA

<213> Homo Sapien

<400> 87

agaaagctgc actctgttga gctccagggc gcagtggagg gagggagtga 50
aggagctctc tgtacccaag gaaagtgcag ctgagactca gacaagatta 100
caatgaacca actcagcttc ctgctgttcc tcatagcgac caccagagga 150
tggagtacag atgaggctaa tacttacttc aaggaatgga cctgttcttc 200
gtctccatct ctgccagaa gctgcaagga aatcaagac gaatgtccta 250
gtgcatttga tggcctgtat tttctcgca ctgagaatgg tgttatctac 300
cagaccttct gtgacatgac ctctgggggt ggcggctgga ccctggtggc 350
cagcgtgcat gagaatgaca tgcgtgggaa gtgcacggtg ggcgatcgct 400
ggccagtcga gcagggcagc aaagcagact acccagaggg ggacggcaac 450
tgggccaact acaacacctt tggatctgca gaggcggcca cgagcgatga 500
ctacaagaac cctggctact acgacatcca ggccaaggac ctgggcatct 550
ggcaggtgcc caataagtc ccatgcagc actggagaaa cagctccctg 600
ctgagggtacc gcacggacac tggcttctc cagacactgg gacataatc 650
gtttgcatc taccagaaat atccagtga atatggagaa ggaagtgtt 700
ggactgacaa cggcccggtg atccctgtg tctatgatt tggcgagcc 750
cagaaaacag catcttatta ctaccctat ggccagcggg aattcactgc 800
gggatttgtt cagttcaggg tatttaataa cgagagagca gccaacgcct 850
tgtgtgctgg aatgaggggc accggatgta acactgagca tcactgcatt 900

Sequence Listing - P3230R1C1.txt

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 gccgtgagat aactgaggca gctgtgcttc tattctatcg ttgagagttt 1050
 tgtgggaggg aaccagacc tctcctcca accatgagat cccaaggatg 1100
 gagaacaact tacccagtag ctagaatgtt aatggcagaa gagaaaaaca 1150
 taaatcatat tgactcaaga aaaaaa 1176

<210> 88

<211> 313

<212> PRT

<213> Homo Sapien

<400> 88

Met Asn Gln Leu Ser Phe Leu Leu Phe Leu Ile Ala Thr Thr Arg
 1 5 10 15

Gly Trp Ser Thr Asp Glu Ala Asn Thr Tyr Phe Lys Glu Trp Thr
 20 25 30

Cys Ser Ser Ser Pro Ser Leu Pro Arg Ser Cys Lys Glu Ile Lys
 35 40 45

Asp Glu Cys Pro Ser Ala Phe Asp Gly Leu Tyr Phe Leu Arg Thr
 50 55 60

Glu Asn Gly Val Ile Tyr Gln Thr Phe Cys Asp Met Thr Ser Gly
 65 70 75

Gly Gly Gly Trp Thr Leu Val Ala Ser Val His Glu Asn Asp Met
 80 85 90

Arg Gly Lys Cys Thr Val Gly Asp Arg Trp Ser Ser Gln Gln Gly
 95 100 105

Ser Lys Ala Asp Tyr Pro Glu Gly Asp Gly Asn Trp Ala Asn Tyr
 110 115 120

Asn Thr Phe Gly Ser Ala Glu Ala Ala Thr Ser Asp Asp Tyr Lys
 125 130 135

Asn Pro Gly Tyr Tyr Asp Ile Gln Ala Lys Asp Leu Gly Ile Trp
 140 145 150

His Val Pro Asn Lys Ser Pro Met Gln His Trp Arg Asn Ser Ser
 155 160 165

Leu Leu Arg Tyr Arg Thr Asp Thr Gly Phe Leu Gln Thr Leu Gly
 170 175 180

His Asn Leu Phe Gly Ile Tyr Gln Lys Tyr Pro Val Lys Tyr Gly

Sequence Listing - P3230R1C1.txt

185	190	195
Glu Gly Lys Cys Trp Thr Asp Asn Gly Pro Val Ile Pro Val Val		
200	205	210
Tyr Asp Phe Gly Asp Ala Gln Lys Thr Ala Ser Tyr Tyr Ser Pro		
215	220	225
Tyr Gly Gln Arg Glu Phe Thr Ala Gly Phe Val Gln Phe Arg Val		
230	235	240
Phe Asn Asn Glu Arg Ala Ala Asn Ala Leu Cys Ala Gly Met Arg		
245	250	255
Val Thr Gly Cys Asn Thr Glu His His Cys Ile Gly Gly Gly Gly		
260	265	270
Tyr Phe Pro Glu Ala Ser Pro Gln Gln Cys Gly Asp Phe Ser Gly		
275	280	285
Phe Asp Trp Ser Gly Tyr Gly Thr His Val Gly Tyr Ser Ser Ser		
290	295	300
Arg Glu Ile Thr Glu Ala Ala Val Leu Leu Phe Tyr Arg		
305	310	

<210> 89

<211> 759

<212> DNA

<213> Homo Sapien

<400> 89

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tcagggttg tgccctctcg ctctctgacg ctctggcgc atctgggtgt 150

cgctcatcacc ttattctggt cccgggacag caacatacag gcctgcctgc 200

ctctcacgtt cacccccag gagtatgaca agcaggacat tcagctgggt 250

gccgcgtct ctgtcacctt gggcctctt gcagtggagc tggccgggtt 300

ccttcagga gtctccatgt tcaacagcac ccagagcctc atctccattg 350

gggtcactg tagtgcattc gtggccctgt ccttcttcatt attcgagcgt 400

tgggagtga ctacgtattg gtacatttt gtctctgca gtgccctcc 450

agctgtcact gaaatggctt tattctgcac cgtctttggg ctgaaaaga 500

aaccttctg attaccttca tgacgggaac ctaaggacga agcctacagg 550

ggcaagggcc gcttcgtatt cctggaagaa ggaaggcata ggcttcggtt 600

Sequence Listing - P3230R1C1.txt

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tcttgagtct gggattatcc gcattgtatt tagtgctttg taataaata 700

gtttttgtag taacattaag acttatatac agttttaggg gacaataaa 750

aaaaaaaa 759

<210> 90

<211> 140

<212> PRT

<213> Homo Sapien

<400> 90

Met Gly Arg Val Ser Gly Leu Val Pro Ser Arg Phe Leu Thr Leu
1 5 10 15

Leu Ala His Leu Val Val Val Ile Thr Leu Phe Trp Ser Arg Asp
20 25 30

Ser Asn Ile Gln Ala Cys Leu Pro Leu Thr Phe Thr Pro Glu Glu
35 40 45

Tyr Asp Lys Gln Asp Ile Gln Leu Val Ala Ala Leu Ser Val Thr
50 55 60

Leu Gly Leu Phe Ala Val Glu Leu Ala Gly Phe Leu Ser Gly Val
65 70 75

Ser Met Phe Asn Ser Thr Gln Ser Leu Ile Ser Ile Gly Ala His
80 85 90

Cys Ser Ala Ser Val Ala Leu Ser Phe Phe Ile Phe Glu Arg Trp
95 100 105

Glu Cys Thr Thr Tyr Trp Tyr Ile Phe Val Phe Cys Ser Ala Leu
110 115 120

Pro Ala Val Thr Glu Met Ala Leu Phe Val Thr Val Phe Gly Leu
125 130 135

Lys Lys Lys Pro Phe
140

<210> 91

<211> 1871

<212> DNA

<213> Homo Sapien

<400> 91

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gaagatgcaa ctgactcgct gctgcttcgt gttctggtg cagggtagcc 100

Sequence Listing - P3230R1C1.txt

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 gcgggggcac atctcaccta agtccccccc catggccaat tcaactctc 250
 tagggctgct gggcccgcct ggggaggctt ggggcattct tgggcagccc 300
 cccaaccgcc cgaaccacag cccccacc ctagccaagg tgaagaaaa 350
 ctttgctgg ggcgacttct actccaacat caagacgggt gccctgaacc 400
 tgcctgtcac agggaagatt gtggaccatg gcaatgggac cttcagcgtc 450
 cactccaac acaatgccac aggccaggga aacatctcca tcagcctcgt 500
 gccccccagt aaagctgtag agttccacca ggaacagcag atcttcacg 550
 aagccaaggc ctccaaaate ttcaactgcc ggatggagtg ggagaaggta 600
 gaacggggcc gccggcacct gctttgcacc cagacccag ccaagatctg 650
 ctcccgagac cagctcaga gctcagccac ctggagctgc tccagccct 700
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 ccatctggg tgacccggg caggccacag aggccaggcc agggctggaa 850
 ggacaggcct gcccatgcag gagaccatct ggacaccggg cagggaaggg 900
 gttgggcctc aggcaggag gggggtggag acgaggagat gccaaagtgg 950
 gccagggcca agtctcaagt ggagagaaa gggcccaag tgctgtccc 1000
 aacctgaagc tgtggagtga ctatcacaca ggagcactgg aggaggagt 1050
 ggtctctgt gcagctcac agggcttgc caggagcca cagagagatg 1100
 ctgggtccc gaggcctgtg ggcaggccga tcatgttgg cccagatcaa 1150
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 gtcttgacag attgaccatc tgtctccagc caggccccc cttccaaa 1450
 ttccctctc tgccagtact cccctgtac caccattgc tgatggcaca 1500

Sequence Listing - P3230R1C1.txt

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 aaccgctgat tgctgacttt tgtgtgaaga atcgtgttct tggagcagga 1850
 aataaagctt gccccggggc a 1871

<210> 92

<211> 252

<212> PRT

<213> Homo Sapien

<400> 92

Met Gln Leu Thr Arg Cys Cys Phe Val Phe Leu Val Gln Gly Ser
 1 5 10 15

Leu Tyr Leu Val Ile Cys Gly Gln Asp Asp Gly Pro Pro Gly Ser
 20 25 30

Glu Asp Pro Glu Arg Asp Asp His Glu Gly Gln Pro Arg Pro Arg
 35 40 45

Val Pro Arg Lys Arg Gly His Ile Ser Pro Lys Ser Arg Pro Met
 50 55 60

Ala Asn Ser Thr Leu Leu Gly Leu Leu Ala Pro Pro Gly Glu Ala
 65 70 75

Trp Gly Ile Leu Gly Gln Pro Pro Asn Arg Pro Asn His Ser Pro
 80 85 90

Pro Pro Ser Ala Lys Val Lys Lys Ile Phe Gly Trp Gly Asp Phe
 95 100 105

Tyr Ser Asn Ile Lys Thr Val Ala Leu Asn Leu Leu Val Thr Gly
 110 115 120

Lys Ile Val Asp His Gly Asn Gly Thr Phe Ser Val His Phe Gln
 125 130 135

His Asn Ala Thr Gly Gln Gly Asn Ile Ser Ile Ser Leu Val Pro
 140 145 150

Pro Ser Lys Ala Val Glu Phe His Gln Glu Gln Gln Ile Phe Ile
 155 160 165

Glu Ala Lys Ala Ser Lys Ile Phe Asn Cys Arg Met Glu Trp Glu

Sequence Listing - P3230R1C1.txt

170	175	180
Lys Val Glu Arg Gly Arg Arg Thr Ser Leu Cys Thr His Asp Pro		
185	190	195
Ala Lys Ile Cys Ser Arg Asp His Ala Gln Ser Ser Ala Thr Trp		
200	205	210
Ser Cys Ser Gln Pro Phe Lys Val Val Cys Val Tyr Ile Ala Phe		
215	220	225
Tyr Ser Thr Asp Tyr Arg Leu Val Gln Lys Val Cys Pro Asp Tyr		
230	235	240
Asn Tyr His Ser Asp Thr Pro Tyr Tyr Pro Ser Gly		
245	250	

<210> 93

<211> 902

<212> DNA

<213> Homo Sapien

<400> 93

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 tatcatcttc ctcatcgccg gagctttctt ctggttggtg tctctactga 150
 ttctgcctt tgtttggttc atggcaagag tcattattga caacaaagat 200
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 tcagcattta taatctggt gctcatgggc acctgggcat tcttagctgc 700
 gggaggcagc tgccgaagcc tgaaactctg cctgctctgc caagacaaga 750
 actttcttct ttacaaccag cgctccagat aacctcaggg aaccagcact 800

Sequence Listing - P3230R1.C1.txt

tcccaaaccg cagactacat ctttagagga agcacaactg tgccttttc 850

tgaaaaatccc tttttctggt ggaattgaga aagaaataaa actatgcaga 900

ta 902

<210> 94

<211> 257

<212> PRT

<213> Homo Sapien

<400> 94

Met Thr Ala Ala Val Phe Phe Gly Cys Ala Phe Ile Ala Phe Gly
1 5 10 15

Pro Ala Leu Ala Leu Tyr Val Phe Thr Ile Ala Ile Glu Pro Leu
20 25 30

Arg Ile Ile Phe Leu Ile Ala Gly Ala Phe Phe Trp Leu Val Ser
35 40 45

Leu Leu Ile Ser Ser Leu Val Trp Phe Met Ala Arg Val Ile Ile
50 55 60

Asp Asn Lys Asp Gly Pro Thr Gln Lys Tyr Leu Leu Ile Phe Gly
65 70 75

Ala Phe Val Ser Val Tyr Ile Gln Glu Met Phe Arg Phe Ala Tyr
80 85 90

Tyr Lys Leu Leu Lys Lys Ala Ser Glu Gly Leu Lys Ser Ile Asn
95 100 105

Pro Gly Glu Thr Ala Pro Ser Met Arg Leu Leu Ala Tyr Val Ser
110 115 120

Gly Leu Gly Phe Gly Ile Met Ser Gly Val Phe Ser Phe Val Asn
125 130 135

Thr Leu Ser Asp Ser Leu Gly Pro Gly Thr Val Gly Ile His Gly
140 145 150

Asp Ser Pro Gln Phe Phe Leu Tyr Ser Ala Phe Met Thr Leu Val
155 160 165

Ile Ile Leu Leu His Val Phe Trp Gly Ile Val Phe Phe Asp Gly
170 175 180

Cys Glu Lys Lys Lys Trp Gly Ile Leu Leu Ile Val Leu Leu Thr
185 190 195

His Leu Leu Val Ser Ala Gln Thr Phe Ile Ser Ser Tyr Tyr Gly
200 205 210

Ile Asn Leu Ala Ser Ala Phe Ile Ile Leu Val Leu Met Gly Thr

Sequence Listing - P3230R1C1.txt

215	220	225
Trp Ala Phe Leu Ala Ala Gly Gly Ser Cys Arg Ser Leu Lys Leu		
230	235	240
Cys Leu Leu Cys Gln Asp Lys Asn Phe Leu Leu Tyr Asn Gln Arg		
245	250	255
Ser Arg		

<210> 95

<211> 1073

<212> DNA

<213> Homo Sapien

<400> 95

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acattttgcc tcgtggaccc aaaggtagca atctgaaaca tgaggagtac 100

gattctactg tttgtcttc taggatcaac tcggtcatta ccacagtca 150

aaactgcttt gggactccct ccacaaaac tggctccgga tcagggaaca 200

ctaccaaacc aacagcagtc aaatcagggtc tttcctctt taagtctgat 250

accattaaca cagatgctca cactggggcc agatctgcat ctgttaaacc 300

ctgtgcagg aatgacacct ggtaccaga cccaccatt gacctggga 350

gggttgaatg tacaacagca actgcacca catgtgttac caatttttgt 400

cacacaactt ggagcccagg gcactatcct aagctcagag gaattgccac 450

aatcttcac gagcctcacc atccattcct tgttccggg aggcaccctg 500

cccaccagtc aggcaggggc taatccagat gtccaggatg gaagccttc 550

agcaggagga gcagggtgaa atcctgccac ccagggaacc ccagcaggcc 600

gcctccaac tccagtggtc acagtgacg actttgcagt gaccaccct 650

gcaggcatcc aaaggagcac acatgccacc gaggaagcca ccagaatc 700

agcaaatgga attcagtaag ctgtttcaaa tttttcaac taagctgcct 750

cgaatttggt gatacatgtg aatctttatc attgattata ttatgaata 800

gattgagaca cattgtagat tcttagaaga aattaattct taatttacct 850

gaaaatattc ttgaaattc agaaaatatg ttctatgtag agaatcccaa 900

cttttaaaaa caataattca atggataaat ctgtctttga aatataacat 950

Sequence Listing - P3230R1C1.txt

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aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1050

aaaaaaaaa aaaaaaaaaa aaa 1073

<210> 96

<211> 209

<212> PRT

<213> Homo Sapien

<400> 96

Met Arg Ser Thr Ile Leu Leu Phe Cys Leu Leu Gly Ser Thr Arg
1 5 10 15

Ser Leu Pro Gln Leu Lys Pro Ala Leu Gly Leu Pro Pro Thr Lys
20 25 30

Leu Ala Pro Asp Gln Gly Thr Leu Pro Asn Gln Gln Gln Ser Asn
35 40 45

Gln Val Phe Pro Ser Leu Ser Leu Ile Pro Leu Thr Gln Met Leu
50 55 60

Thr Leu Gly Pro Asp Leu His Leu Leu Asn Pro Ala Ala Gly Met
65 70 75

Thr Pro Gly Thr Gln Thr His Pro Leu Thr Leu Gly Gly Leu Asn
80 85 90

Val Gln Gln Gln Leu His Pro His Val Leu Pro Ile Phe Val Thr
95 100 105

Gln Leu Gly Ala Gln Gly Thr Ile Leu Ser Ser Glu Glu Leu Pro
110 115 120

Gln Ile Phe Thr Ser Leu Ile Ile His Ser Leu Phe Pro Gly Gly
125 130 135

Ile Leu Pro Thr Ser Gln Ala Gly Ala Asn Pro Asp Val Gln Asp
140 145 150

Gly Ser Leu Pro Ala Gly Gly Ala Gly Val Asn Pro Ala Thr Gln
155 160 165

Gly Thr Pro Ala Gly Arg Leu Pro Thr Pro Ser Gly Thr Asp Asp
170 175 180

Asp Phe Ala Val Thr Thr Pro Ala Gly Ile Gln Arg Ser Thr His
185 190 195

Ala Ile Glu Glu Ala Thr Thr Glu Ser Ala Asn Gly Ile Gln
200 205

<210> 97

Sequence Listing - P3230R1C1.txt

<211> 2848

<212> DNA

<213> Homo Sapien

<400> 97

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Sequence Listing - P3230R1C1.txt

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agaccatggc ttgatcgtga gtggaccag caaggacccc gatctggcca 2150
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cgggattggc gcctccagc tctcaatggt tccatgcct acctacctt 2250
ggccctgcat tgggtggagc cactgaaca cataatccc gtggtggtca 2300
gccacaatgc ccagatgtg cagctcctg ttgagtgat cgtgtgtcgc 2350
tgcaactgtg aggggcagtg catgcgaag gtgggccgca tgaaggcat 2400
gcccacgaag ctgtcggcag tgggcatcct ttaggcacc ctggtagcaa 2450
taggaatctt cctatcctc attttcacc actggacct gtcaaggaa 2500
aaggaccggc atcaaccagc agacagcgtg cccctgaag cgactgtct 2550
aatggccag gcagctctag ctgggagctt ggcctctggc tcatctgag 2600
tccctggga gagagcccag cacccaagat ccagcagggg acaggacaga 2650

Sequence Listing - P3230R1C1.txt

gtagaagccc ctccatctgc cctggggtgg aggcaccatc accatcacca 2700

ggcatgtctg cagagcctgg acaccaactt tatggactgc ccatgggagt 2750

gtcccaaatg tcagggtgtt tgcccaataa taaagcccca gagaactggg 2800

ctgggcccta tgggaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaag 2848

<210> 98

<211> 807

<212> PRT

<213> Homo Sapien

<400> 98

Met Val Pro Ala Trp Leu Trp Leu Leu Cys Val Ser Val Pro Gln
1 5 10 15

Ala Leu Pro Lys Ala Gln Pro Ala Glu Leu Ser Val Glu Val Pro
20 25 30

Glu Asn Tyr Gly Gly Asn Phe Pro Leu Tyr Leu Thr Lys Leu Pro
35 40 45

Leu Pro Arg Glu Gly Ala Glu Gly Gln Ile Val Leu Ser Gly Asp
50 55 60

Ser Gly Lys Ala Thr Glu Gly Pro Phe Ala Met Asp Pro Asp Ser
65 70 75

Gly Phe Leu Leu Val Thr Arg Ala Leu Asp Arg Glu Glu Gln Ala
80 85 90

Glu Tyr Gln Leu Gln Val Thr Leu Glu Met Gln Asp Gly His Val
95 100 105

Leu Trp Gly Pro Gln Pro Val Leu Val His Val Lys Asp Glu Asn
110 115 120

Asp Gln Val Pro His Phe Ser Gln Ala Ile Tyr Arg Ala Arg Leu
125 130 135

Ser Arg Gly Thr Arg Pro Gly Ile Pro Phe Leu Phe Leu Glu Ala
140 145 150

Ser Asp Arg Asp Glu Pro Gly Thr Ala Asn Ser Asp Leu Arg Phe
155 160 165

His Ile Leu Ser Gln Ala Pro Ala Gln Pro Ser Pro Asp Met Phe
170 175 180

Gln Leu Glu Pro Arg Leu Gly Ala Leu Ala Leu Ser Pro Lys Gly
185 190 195

Ser Thr Ser Leu Asp His Ala Leu Glu Arg Thr Tyr Gln Leu Leu

Sequence Listing - P3230R1C1.txt

200	205	210
Val Gln Val Lys Asp Met Gly Asp Gln Ala Ser Gly His Gln Ala		
215	220	225
Thr Ala Thr Val Glu Val Ser Ile Ile Glu Ser Thr Trp Val Ser		
230	235	240
Leu Glu Pro Ile His Leu Ala Glu Asn Leu Lys Val Leu Tyr Pro		
245	250	255
His His Met Ala Gln Val His Trp Ser Gly Gly Asp Val His Tyr		
260	265	270
His Leu Glu Ser His Pro Pro Gly Pro Phe Glu Val Asn Ala Glu		
275	280	285
Gly Asn Leu Tyr Val Thr Arg Glu Leu Asp Arg Glu Ala Gln Ala		
290	295	300
Glu Tyr Leu Leu Gln Val Arg Ala Gln Asn Ser His Gly Glu Asp		
305	310	315
Tyr Ala Ala Pro Leu Glu Leu His Val Leu Val Met Asp Glu Asn		
320	325	330
Asp Asn Val Pro Ile Cys Pro Pro Arg Asp Pro Thr Val Ser Ile		
335	340	345
Pro Glu Leu Ser Pro Pro Gly Thr Glu Val Thr Arg Leu Ser Ala		
350	355	360
Glu Asp Ala Asp Ala Pro Gly Ser Pro Asn Ser His Val Val Tyr		
365	370	375
Gln Leu Leu Ser Pro Glu Pro Glu Asp Gly Val Glu Gly Arg Ala		
380	385	390
Phe Gln Val Asp Pro Thr Ser Gly Ser Val Thr Leu Gly Val Leu		
395	400	405
Pro Leu Arg Ala Gly Gln Asn Ile Leu Leu Leu Val Leu Ala Met		
410	415	420
Asp Leu Ala Gly Ala Glu Gly Gly Phe Ser Ser Thr Cys Glu Val		
425	430	435
Glu Val Ala Val Thr Asp Ile Asn Asp His Ala Pro Glu Phe Ile		
440	445	450
Thr Ser Gln Ile Gly Pro Ile Ser Leu Pro Glu Asp Val Glu Pro		
455	460	465
Gly Thr Leu Val Ala Met Leu Thr Ala Ile Asp Ala Asp Leu Glu		
470	475	480

Sequence Listing - P3230R1C1.txt

Pro Ala Phe Arg Leu Met Asp Phe Ala Ile Glu Arg Gly Asp Thr
485 490 495

Glu Gly Thr Phe Gly Leu Asp Trp Glu Pro Asp Ser Gly His Val
500 505 510

Arg Leu Arg Leu Cys Lys Asn Leu Ser Tyr Glu Ala Ala Pro Ser
515 520 525

His Glu Val Val Val Val Val Gln Ser Val Ala Lys Leu Val Gly
530 535 540

Pro Gly Pro Gly Pro Gly Ala Thr Ala Thr Val Thr Val Leu Val
545 550 555

Glu Arg Val Met Pro Pro Pro Lys Leu Asp Gln Glu Ser Tyr Glu
560 565 570

Ala Ser Val Pro Ile Ser Ala Pro Ala Gly Ser Phe Leu Leu Thr
575 580 585

Ile Gln Pro Ser Asp Pro Ile Ser Arg Thr Leu Arg Phe Ser Leu
590 595 600

Val Asn Asp Ser Glu Gly Trp Leu Cys Ile Glu Lys Phe Ser Gly
605 610 615

Glu Val His Thr Ala Gln Ser Leu Gln Gly Ala Gln Pro Gly Asp
620 625 630

Thr Tyr Thr Val Leu Val Glu Ala Gln Asp Thr Ala Leu Thr Leu
635 640 645

Ala Pro Val Pro Ser Gln Tyr Leu Cys Thr Pro Arg Gln Asp His
650 655 660

Gly Leu Ile Val Ser Gly Pro Ser Lys Asp Pro Asp Leu Ala Ser
665 670 675

Gly His Gly Pro Tyr Ser Phe Thr Leu Gly Pro Asn Pro Thr Val
680 685 690

Gln Arg Asp Trp Arg Leu Gln Thr Leu Asn Gly Ser His Ala Tyr
695 700 705

Leu Thr Leu Ala Leu His Trp Val Glu Pro Arg Glu His Ile Ile
710 715 720

Pro Val Val Val Ser His Asn Ala Gln Met Trp Gln Leu Leu Val
725 730 735

Arg Val Ile Val Cys Arg Cys Asn Val Glu Gly Gln Cys Met Arg
740 745 750

Sequence Listing - P3230R1C1.txt

Lys Val Gly Arg Met Lys Gly Met Pro Thr Lys Leu Ser Ala Val
755 760 765

Gly Ile Leu Val Gly Thr Leu Val Ala Ile Gly Ile Phe Leu Ile
770 775 780

Leu Ile Phe Thr His Trp Thr Met Ser Arg Lys Lys Asp Pro Asp
785 790 795

Gln Pro Ala Asp Ser Val Pro Leu Lys Ala Thr Val
800 805

<210> 99

<211> 2436

<212> DNA

<213> Homo Sapien

<400> 99

ggctgaccgt gctacattgc ctggaggaag cctaaggaac ccaggcatcc 50
agctgccac gcctgagtc aagattcttc ccaggaacac aaacgtagga 100
gaccacgct cctggaagca ccagccttta tctctcacc tcaagtccc 150
ctttctcaag aatcctctgt tcttgcct ctaaagtctt ggtacatcta 200
ggaccaggc atctgtctt ccagccaca agagacagat gaagatgcag 250
aaaggaaatg ttctcttat gtttggctta ctattgcatt tagaagctgc 300
aacaattcc aatgagacta gcacctctgc caacactgga tccagtgtga 350
tctccagtgg agccagcaca gccaccaact ctgggtccag tgtgacctcc 400
agtggggcca gcacagccac catctcaggg tccagcgtga cctccaatgg 450
ggtcagcata gtcaccaact ctgagttcca tacaacctcc agtgggatca 500
gcacagccac caactctgag ttcagcacag cgtccagtgg gatcagcata 550
gccaccaact ctgagtccag cacaacctcc agtggggcca gcacagccac 600
caactctgag tccagcacac cctccagtgg ggccagcaca gtcaccaact 650
ctgggtccag tgtgacctcc agtggagcca gcactgccac caactctgag 700
tccagcacag tgtccagttag ggccagcact gccaccaact ctgagtctag 750
cacactctcc agtggggcca gcacagccac caactctgac tccagcaca 800
cctccagtgg ggctagcaca gccaccaact ctgagtccag cacaacctcc 850
agtggggcca gcacagccac caactctgag tccagcacag tgtccagttag 900
ggccagcact gccaccaact ctgagtccag cacaacctcc agtggggcca 950

Sequence Listing - P3230R1C1.txt

gcacagccac caactctgag tccagaacga cctccaatgg ggctggcaca 1000
gccaccaact ctgagtcag cagacctcc agtggggcca gcacagccac 1050
caactctgac tccagcacag tgtccagtgg ggccagcact gccaccaact 1100
ctgagtcag cagacctcc agtggggcca gcacagccac caactctgag 1150
tccagcacga cctccagtgg ggctagcaca gccaccaact ctgactccag 1200
cacaacctcc agtggggccg gcacagccac caactctgag tccagcacag 1250
tgtccagtgg gatcagcaca gtcaccaatt ctgagtcag cacacctcc 1300
agtggggcca acacagccac caactctgag tccagtacga cctccagtgg 1350
ggccaacaca gccaccaact ctgagtcag cacagtgtcc agtggggcca 1400
gcactgccac caactctgag tccagcaca cctccagtgg ggtagcaca 1450
gccaccaact ctgagtcag cacaacctcc agtggggcta gcacagccac 1500
caactctgac tccagcaca cctccagtga ggccagcaca gccaccaact 1550
ctgagtctag cacagtgtcc agtgggatca gcacagtcac caattctgag 1600
tccagcaca cctccagtgg ggccaacaca gccaccaact ctgggtccag 1650
tgtacctct gcaggctctg gaacagcagc tctgactgga atgcacaca 1700
cttcccatag tgcattact gcagtgagt agggcaagcc tgggtgggtc 1750
ctgggtccgt gggaaatctt cctcatcacc ctggtctcgg ttgtggcggc 1800
cgtggggctc ttgctgggc tcttctctg tgtgagaaac agcctgtccc 1850
tgagaaacac ctttaacaca gctgtctacc acctcatgg cctcaacct 1900
ggccttggtc caggccctgg aggggaatcat ggagcccccc acaggcccat 1950
gtggagtctt aactggttct ggaggagacc agtatcatcg atagccatgg 2000
agatgagcgg gaggaacagc gggccctgag cagccccgga agcaagtgcc 2050
gcattcttca ggaaggaaga gacctgggca cccaagacct ggtttcttt 2100
cattcatccc aggagacccc tccagcttt gtttgagatc ctgaaatct 2150
tgaagaaggt attcctcacc ttcttgctt ttaccagaca ctgaaagag 2200
aatactatat tgctcattta gctaagaaat aaatacatct catctaacac 2250
acacgacaaa gagaagctgt gcttgccccg ggggtgggtat ctagtctga 2300

Sequence Listing - P3230R1.C1.txt

gatgaactca gttataggag aaaacctcca tgctggactc catctggcat 2350

tcaaaatctc cacagtaaaa tccaaagacc tcaaaaaaaaa aaaaaaaaaa 2400

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 2436

<210> 100

<211> 596

<212> PRT

<213> Homo Sapien

<400> 100

Met Lys Met Gln Lys Gly Asn Val Leu Leu Met Phe Gly Leu Leu

1 5 10 15

Leu His Leu Glu Ala Ala Thr Asn Ser Asn Glu Thr Ser Thr Ser

20 25 30

Ala Asn Thr Gly Ser Ser Val Ile Ser Ser Gly Ala Ser Thr Ala

35 40 45

Thr Asn Ser Gly Ser Ser Val Thr Ser Ser Gly Val Ser Thr Ala

50 55 60

Thr Ile Ser Gly Ser Ser Val Thr Ser Asn Gly Val Ser Ile Val

65 70 75

Thr Asn Ser Glu Phe His Thr Thr Ser Ser Gly Ile Ser Thr Ala

80 85 90

Thr Asn Ser Glu Phe Ser Thr Ala Ser Ser Gly Ile Ser Ile Ala

95 100 105

Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala

110 115 120

Thr Asn Ser Glu Ser Ser Thr Pro Ser Ser Gly Ala Ser Thr Val

125 130 135

Thr Asn Ser Gly Ser Ser Val Thr Ser Ser Gly Ala Ser Thr Ala

140 145 150

Thr Asn Ser Glu Ser Ser Thr Val Ser Ser Arg Ala Ser Thr Ala

155 160 165

Thr Asn Ser Glu Ser Ser Thr Leu Ser Ser Gly Ala Ser Thr Ala

170 175 180

Thr Asn Ser Asp Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala

185 190 195

Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala

200 205 210

Thr Asn Ser Glu Ser Ser Thr Val Ser Ser Arg Ala Ser Thr Ala

215 220 225

Sequence Listing - P3230R1C1.txt

Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala
230 235 240

Thr Asn Ser Glu Ser Arg Thr Thr Ser Asn Gly Ala Gly Thr Ala
245 250 255

Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala
260 265 270

Thr Asn Ser Asp Ser Ser Thr Val Ser Ser Gly Ala Ser Thr Ala
275 280 285

Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala
290 295 300

Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala
305 310 315

Thr Asn Ser Asp Ser Ser Thr Thr Ser Ser Gly Ala Gly Thr Ala
320 325 330

Thr Asn Ser Glu Ser Ser Thr Val Ser Ser Gly Ile Ser Thr Val
335 340 345

Thr Asn Ser Glu Ser Ser Thr Pro Ser Ser Gly Ala Asn Thr Ala
350 355 360

Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Asn Thr Ala
365 370 375

Thr Asn Ser Glu Ser Ser Thr Val Ser Ser Gly Ala Ser Thr Ala
380 385 390

Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Val Ser Thr Ala
395 400 405

Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Ser Thr Ala
410 415 420

Thr Asn Ser Asp Ser Ser Thr Thr Ser Ser Glu Ala Ser Thr Ala
425 430 435

Thr Asn Ser Glu Ser Ser Thr Val Ser Ser Gly Ile Ser Thr Val
440 445 450

Thr Asn Ser Glu Ser Ser Thr Thr Ser Ser Gly Ala Asn Thr Ala
455 460 465

Thr Asn Ser Gly Ser Ser Val Thr Ser Ala Gly Ser Gly Thr Ala
470 475 480

Ala Leu Thr Gly Met His Thr Thr Ser His Ser Ala Ser Thr Ala
485 490 495

Sequence Listing - P3230R1C1.txt

Val Ser Glu Ala Lys Pro Gly Gly Ser Leu Val Pro Trp Glu Ile
 500 505 510

Phe Leu Ile Thr Leu Val Ser Val Val Ala Ala Val Gly Leu Phe
 515 520 525

Ala Gly Leu Phe Phe Cys Val Arg Asn Ser Leu Ser Leu Arg Asn
 530 535 540

Thr Phe Asn Thr Ala Val Tyr His Pro His Gly Leu Asn His Gly
 545 550 555

Leu Gly Pro Gly Pro Gly Gly Asn His Gly Ala Pro His Arg Pro
 560 565 570

Arg Trp Ser Pro Asn Trp Phe Trp Arg Arg Pro Val Ser Ser Ile
 575 580 585

Ala Met Glu Met Ser Gly Arg Asn Ser Gly Pro
 590 595

<210> 101

<211> 1728

<212> DNA

<213> Homo Sapien

<400> 101

ggccggacgc ctccgcgtta cgggatgaat taacggcggg ttccgcacgg 50

aggttgtgac ccctacggag cccagcttg cccacgcacc ccactcggcg 100

tcgcgcggcg tgccctgctt gtcacaggtg ggaggctgga actatcagcg 150

tgaaaaacag agtgggtact ctcttctggg aagctggcaa caatggatg 200

atgtgatata tgcattccag gggaagggaa attgtggtgc ttctgaacc 250

atggtaatt aacgaggcag ttctagcta ctgcacgtac tcataaagc 300

aggactctaa aagctttgga atcatggtgt catggaagg gattacttt 350

atactgactc tgttttgggg aagcttttt ggaagcattt tcatgctgag 400

tccttttta cctttgatgt ttgtaaaccc atcttggtat cgctggatca 450

acaaccgcct tgtggcaaca tggtcaccc tacctgtggc attattggag 500

accatgtttg gtgtaaaagt gattataact ggggatgcat ttgttcctg 550

agaagaagt gtcattatca tgaaccatcg gacaagaatg gactggatgt 600

tcctgtggaa ttgcctgatg cgatatagct acctcagatt ggagaaaaat 650

tgctctaaag cgagctctca aggtgttctt ggatttgggt gggccatgca 700

ggctgctgcc tatacttca ttcataaggaa atggaaggat gacaagagcc 750

Sequence Listing - P3230R1C1.txt

atttgaaga catgattgat tacttttgtg atattcacga accacttcaa 800
ctcctcatat tcccagaagg gactgatctc acagaaaaca gcaagtctcg 850
aagtaatgca ttgtctgaaa aaaatggact tcagaaatat gaatatgttt 900
tacatccaag aactacaggc ttacttttg tggtagaccg tctaagagaa 950
ggtaagaacc ttgatgctgt ccatgatac actgtggcgt atctcacaa 1000
cattctcaa tcagagaagc acctcctcca aggagacttt cccagggaaa 1050
tcactttca cgtcaccgg tatccaatag acacctccc cacatccaag 1100
gaggaccttc aactctgggt ccacaaacgg tgggaagaga aagaagagag 1150
gtgcgttcc ttctatcaag gggagaagaa tttttattt accggacaga 1200
gtgtcattcc accttgcaag tctgaactca gggctcttgt ggtcaaattg 1250
ctctctatac tgtattggac cctgttcagc cctgcaatgt gcctactcat 1300
atattgttac agtcttgta agtggattt tataatcacc attgtaatct 1350
ttgtgctgca agagagaata ttgggtggac tggagatcat agaacttga 1400
tgttaccgac ttttacacaa acagccacat ttaaattcaa agaaaaatga 1450
gtaagattat aaggtttgcc atgtgaaaac ctagagcata tttggaaat 1500
gttctaaacc ttctaagct cagatgcatt ttgcatgac tatgtcgaat 1550
attctttact gccatcatta ttgttaaag atattttgca cttaattttg 1600
tgggaaaaat attgctacaa tttttttaa tctctgaatg taatttcgat 1650
actgtgtaca tagcagggag tgatcggggg gaaataactt gggccagaat 1700
attattaac aatcatcagg cttttaa 1728

<210> 102

<211> 414

<212> PRT

<213> Homo Sapien

<400> 102

Met His Ser Arg Gly Arg Glu Ile Val Val Leu Leu Asn Pro Trp

1 5 10 15

Ser Ile Asn Glu Ala Val Ser Ser Tyr Cys Thr Tyr Phe Ile Lys

20 25 30

Gln Asp Ser Lys Ser Phe Gly Ile Met Val Ser Trp Lys Gly Ile

35 40 45

Sequence Listing - P3230R1C1.txt

Tyr Phe Ile Leu Thr Leu Phe Trp Gly Ser Phe Phe Gly Ser Ile
 50 55 60
 Phe Met Leu Ser Pro Phe Leu Pro Leu Met Phe Val Asn Pro Ser
 65 70 75
 Trp Tyr Arg Trp Ile Asn Asn Arg Leu Val Ala Thr Trp Leu Thr
 80 85 90
 Leu Pro Val Ala Leu Leu Glu Thr Met Phe Gly Val Lys Val Ile
 95 100 105
 Ile Thr Gly Asp Ala Phe Val Pro Gly Glu Arg Ser Val Ile Ile
 110 115 120
 Met Asn His Arg Thr Arg Met Asp Trp Met Phe Leu Trp Asn Cys
 125 130 135
 Leu Met Arg Tyr Ser Tyr Leu Arg Leu Glu Lys Ile Cys Leu Lys
 140 145 150
 Ala Ser Leu Lys Gly Val Pro Gly Phe Gly Trp Ala Met Gln Ala
 155 160 165
 Ala Ala Tyr Ile Phe Ile His Arg Lys Trp Lys Asp Asp Lys Ser
 170 175 180
 His Phe Glu Asp Met Ile Asp Tyr Phe Cys Asp Ile His Glu Pro
 185 190 195
 Leu Gln Leu Leu Ile Phe Pro Glu Gly Thr Asp Leu Thr Glu Asn
 200 205 210
 Ser Lys Ser Arg Ser Asn Ala Phe Ala Glu Lys Asn Gly Leu Gln
 215 220 225
 Lys Tyr Glu Tyr Val Leu His Pro Arg Thr Thr Gly Phe Thr Phe
 230 235 240
 Val Val Asp Arg Leu Arg Glu Gly Lys Asn Leu Asp Ala Val His
 245 250 255
 Asp Ile Thr Val Ala Tyr Pro His Asn Ile Pro Gln Ser Glu Lys
 260 265 270
 His Leu Leu Gln Gly Asp Phe Pro Arg Glu Ile His Phe His Val
 275 280 285
 His Arg Tyr Pro Ile Asp Thr Leu Pro Thr Ser Lys Glu Asp Leu
 290 295 300
 Gln Leu Trp Cys His Lys Arg Trp Glu Glu Lys Glu Glu Arg Leu
 305 310 315

Sequence Listing - P3230R1C1.txt

Arg Ser Phe Tyr Gln Gly Glu Lys Asn Phe Tyr Phe Thr Gly Gln
 320 325 330

Ser Val Ile Pro Pro Cys Lys Ser Glu Leu Arg Val Leu Val Val
 335 340 345

Lys Leu Leu Ser Ile Leu Tyr Trp Thr Leu Phe Ser Pro Ala Met
 350 355 360

Cys Leu Leu Ile Tyr Leu Tyr Ser Leu Val Lys Trp Tyr Phe Ile
 365 370 375

Ile Thr Ile Val Ile Phe Val Leu Gln Glu Arg Ile Phe Gly Gly
 380 385 390

Leu Glu Ile Ile Glu Leu Ala Cys Tyr Arg Leu Leu His Lys Gln
 395 400 405

Pro His Leu Asn Ser Lys Lys Asn Glu
 410

<210> 103

<211> 2403

<212> DNA

<213> Homo Sapien

<400> 103

cggtcgcgagc ggctcgagtg aagagcctct ccacggctcc tgcgcctgag 50

acagctggcc tgacctcaa atcatccatc caccctgct gtcattctgtt 100

ttcatagtgt gagatcaacc cacaggaata tccatggctt ttgtgctcat 150

tttggttctc agtttctacg agctgggtgc aggacagtgg caagtcactg 200

gaccgggcaa gtttgtccag gccttggtgg gggaggacgc cgtgttctcc 250

tgctccctct ttctgagac cagtgcagag gctatggaag tgcggttctt 300

caggaatcag ttccatgctg tgggccacct ctacagagat ggggaagact 350

gggaatctaa gcagatgcc aagtatcgag ggagaactga gtttgtgaag 400

gactccattg caggggggcg tgtctctcta aggctaaaaa acatcactcc 450

ctcggacatc ggctgtatg ggtgctggtt cagttcccag atttacgatg 500

aggaggccac ctgggagctg cgggtggcag cactgggctc acttctctc 550

atttccatcg tgggatatgt tgacggaggt atccagttac tctgctgtc 600

ctcaggctgg ttccccagc ccacagccaa gtggaaaggt ccacaaggac 650

aggatttctc ttcagactcc agagcaaatg cagatgggta cagcctgtat 700

Sequence Listing - P3230R1C1.txt

gatgtggaga tctccattat agtcaggaa aatgctggga gcatattgtg 750
 ttccatccac cttgctgagc agagtcatga ggtggaatcc aaggtattga 800
 taggagagac gttttccag ccttcacctt ggcgcctggc ttctatttta 850
 ctcggggttac tctgtggtgc cctgtgtggt gttgtcatgg ggatgataat 900
 tgtttcttc aaatccaaag ggaaaatcca ggcggaactg gactggagaa 950
 gaaagcacgg acaggcagaa ttgagagacg cccggaaca cgagtgagg 1000
 gtgactctgg atccagagac ggctcacccg aagctctcg tttctgatct 1050
 gaaaactgta acccatagaa aagctccca ggaggtgcct cactctgaga 1100
 agagatttac aaggaagagt gtggtggctt ctacgggtt ccaagcaggg 1150
 agacattact gggagggtga cgtgggacaa aatgtagggt ggtatgtggg 1200
 agtgtgtcgg gatgacgtag acagggggaa gaacaatgtg actttgtctc 1250
 ccaacaatgg gtattgggtc ctgactga caacagaaca ttgtatttc 1300
 acattcaatc cccatttat cagcctccc ccagcacc ctcctacacg 1350
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 caaatgacca gtccctatt tatacctgc tgacatgtca gtttgaaggc 1450
 ttgttgagac cctatatcca gcatgcgatg tatgacgagg aaaaggggac 1500
 tcccatattc atatgtccag tgtctgggg atgagacaga gaagaccctg 1550
 cttaaagggc ccacaccac agaccagac acagccaagg gagagtgtct 1600
 ccgacagggt gccccagctt cctctcggga gctgcgcac agagagtca 1650
 gcccccaact ctccttagg gagctgaggt tctctgccc tgagcctgc 1700
 agcagcggca gtcacagctt ccagatgagg ggggattggc ctgaccctgt 1750
 gggagtgcga agccatggct gccctgaagt ggggacggaa tagactcaca 1800
 ttaggtttag ttgtgaaaa ctccatccag ctaagcgatc ttgaacaagt 1850
 cacaacctcc caggctctc atttgtagt caccgacagt gattctgtcc 1900
 tcacagggtga agattaaaga gacaacgaat gtgaatcatg cttgcaggtt 1950
 tgaaggcaca gtgtttgcta atgatgtgt ttatatatt acattttccc 2000
 accataaact ctgtttgctt attccacatt aatttacttt tctctatacc 2050
 aaatcaccca tggaatagtt attgaacacc tgctttgtga ggctcaaga 2100

Sequence Listing - P3230R1C1.txt

ataaagagga ggtaggattt ttactgatt ctataagccc agcattacct 2150
gataccaaaa ccaggcaaag aaacagaag aagaggaagg aaactacag 2200
gtccatatcc ctattaaca cagacacaaa aattctaat aaaattttaa 2250
caaattaaac taaacaatat atttaaagat gatataaac tactcagtg 2300
ggtttgtccc acaatgcag agttggttta atatttaaa atcaaccagt 2350
gtatttcagc acattaataa agtaaaaaag aaaccataa aaaaaaaaaa 2400
aaa 2403

<210> 104

<211> 466

<212> PRT

<213> Homo Sapien

<400> 104

Met Ala Phe Val Leu Ile Leu Val Leu Ser Phe Tyr Glu Leu Val
1 5 10 15

Ser Gly Gln Trp Gln Val Thr Gly Pro Gly Lys Phe Val Gln Ala
20 25 30

Leu Val Gly Glu Asp Ala Val Phe Ser Cys Ser Leu Phe Pro Glu
35 40 45

Thr Ser Ala Glu Ala Met Glu Val Arg Phe Phe Arg Asn Gln Phe
50 55 60

His Ala Val Val His Leu Tyr Arg Asp Gly Glu Asp Trp Glu Ser
65 70 75

Lys Gln Met Pro Gln Tyr Arg Gly Arg Thr Glu Phe Val Lys Asp
80 85 90

Ser Ile Ala Gly Gly Arg Val Ser Leu Arg Leu Lys Asn Ile Thr
95 100 105

Pro Ser Asp Ile Gly Leu Tyr Gly Cys Trp Phe Ser Ser Gln Ile
110 115 120

Tyr Asp Glu Glu Ala Thr Trp Glu Leu Arg Val Ala Ala Leu Gly
125 130 135

Ser Leu Pro Leu Ile Ser Ile Val Gly Tyr Val Asp Gly Gly Ile
140 145 150

Gln Leu Leu Cys Leu Ser Ser Gly Trp Phe Pro Gln Pro Thr Ala
155 160 165

Lys Trp Lys Gly Pro Gln Gly Gln Asp Leu Ser Ser Asp Ser Arg

Sequence Listing - P3230R1C1.txt

170	175	180
Ala Asn Ala Asp Gly Tyr	Ser Leu Tyr Asp Val	Glu Ile Ser Ile
185	190	195
Ile Val Gln Glu Asn Ala	Gly Ser Ile Leu Cys	Ser Ile His Leu
200	205	210
Ala Glu Gln Ser His Glu	Val Glu Ser Lys Val	Leu Ile Gly Glu
215	220	225
Thr Phe Phe Gln Pro Ser	Pro Trp Arg Leu Ala	Ser Ile Leu Leu
230	235	240
Gly Leu Leu Cys Gly Ala	Leu Cys Gly Val Val	Met Gly Met Ile
245	250	255
Ile Val Phe Phe Lys Ser	Lys Gly Lys Ile Gln	Ala Glu Leu Asp
260	265	270
Trp Arg Arg Lys His Gly	Gln Ala Glu Leu Arg	Asp Ala Arg Lys
275	280	285
His Ala Val Glu Val Thr	Leu Asp Pro Glu Thr	Ala His Pro Lys
290	295	300
Leu Cys Val Ser Asp Leu	Lys Thr Val Thr His	Arg Lys Ala Pro
305	310	315
Gln Glu Val Pro His Ser	Glu Lys Arg Phe Thr	Arg Lys Ser Val
320	325	330
Val Ala Ser Gln Gly Phe	Gln Ala Gly Arg His	Tyr Trp Glu Val
335	340	345
Asp Val Gly Gln Asn Val	Gly Trp Tyr Val Gly	Val Cys Arg Asp
350	355	360
Asp Val Asp Arg Gly Lys	Asn Asn Val Thr Leu	Ser Pro Asn Asn
365	370	375
Gly Tyr Trp Val Leu Arg	Leu Thr Thr Glu His	Leu Tyr Phe Thr
380	385	390
Phe Asn Pro His Phe Ile	Ser Leu Pro Pro Ser	Thr Pro Pro Thr
395	400	405
Arg Val Gly Val Phe Leu	Asp Tyr Glu Gly Gly	Thr Ile Ser Phe
410	415	420
Phe Asn Thr Asn Asp Gln	Ser Leu Ile Tyr Thr	Leu Leu Thr Cys
425	430	435
Gln Phe Glu Gly Leu Leu	Arg Pro Tyr Ile Gln	His Ala Met Tyr
440	445	450

Sequence Listing - P3230R1C1.txt

Asp Glu Glu Lys Gly Thr Pro Ile Phe Ile Cys Pro Val Ser Trp
 455 460 465

Gly

<210> 105

<211> 2103

<212> DNA

<213> Homo Sapien

<400> 105

ccttcacagg actcttcatt gctggttggc aatgatgtat cggccagatg 50
 tggtgagggc taggaaaaga gtttgttggg aacctgggt tatcggcctc 100
 gtcatcttca tatccctgat tgtctggca gtgtgcattg gactcactgt 150
 tcattatgtg agatataatc aaaagaagac ctacaattac tatagcacat 200
 tgtcatttac aactgacaaa ctatatctg agtttggcag agaggcttct 250
 aacaatttta cagaaatgag ccagagactt gaatcaatgg tgaaaaatgc 300
 attttataaa tctccattaa gggaagaatt tgtcaagtct cagggttatca 350
 agttcagtca acagaagcat ggagtgttgg ctcatatgct gttgatttgt 400
 agatttctact ctactgagga tcctgaaact gtagataaaa ttgttcaact 450
 tgttttcat gaaaagctgc aagatgctgt aggacccct aaagtagatc 500
 ctactcagt taaaattaaa aaaatcaaca agacagaaac agacagctat 550
 ctaaaccatt gctgcggaac acgaagaagt aaaactctag gtcagagtct 600
 caggatcggt ggtgggacag aagtagaaga ggtgtaatgg ccttggcagg 650
 ctgacctgca gtgggatggg agtcatcgct gtggagcaac cttaattaat 700
 gccacatggc ttgtgagtgc tgtcactgt tttaacaat ataagaacct 750
 tgccagatgg actgcttct ttggagtaac aataaaacct tcgaaaaatga 800
 aacgggggtct ccggagaata attgtccatg aaaaatacaa acaccatca 850
 catgactatg atatttctct tgcagagctt tctagccctg ttccctacac 900
 aaatgcagta catagagttt gtctccctga tgcacctat gagtttcaac 950
 cagggtgatgt gatgtttgtg acaggatttg gagcactgaa aatgatggt 1000
 tacagtcaaa atcatcttcg acaagcacag gtgactctca tagacgtac 1050
 aacttgcaat gaacctcaag cttaacaatga cgccataact cctagaatgt 1100

Sequence Listing - P3230R1C1.txt

tatgtgctgg ctccctagaa ggaaaaacag atgcatgcc gggtgactct 1150
 ggaggaccac tggtagttc agatgctaga gatattcggg accttgctgg 1200
 aatagtgagc tggggagatg aatgtgcgaa acccaacaag cctgggtgtt 1250
 atactagagt tacggccttg cgggactgga ttactcaaa aactggatc 1300
 taagagacaa aagcctcatg gaacagataa cattttttt tgtttttgg 1350
 gtgtggaggc catttttaga gatacagaat tggagaagac ttgcaaaaca 1400
 gctagatttg actgatctca ataaactgtt tgcttgatgc atgtattttc 1450
 ttcccagctc tgttcgcac gtaagcatcc tgctctgcc agatcaactc 1500
 tgtcatctgt gagcaatagt tgaacctta tgtacataga gaaatagata 1550
 atacaatatt acattacagc ctgtattcat ttgttctca gaagttttgt 1600
 cagaattttg actgttgac ataaatttgt aatgatata tacaatttga 1650
 agcactcctt ttcttcagt ctcagctcc tctcattca gcaaatatcc 1700
 attttcaagg tgcagaacaa ggagtgaag aaaataaag aagaaaaaaa 1750
 tccctacat tttattggca cagaaaagta ttagggtgtt ttcttagtgg 1800
 aatattagaa atgatcatat tcattatgaa aggtcaagca aagacagcag 1850
 aataccaatc acttcatcat ttaggaagta tgggaactaa gtaaggaag 1900
 tccagaagaa agccaagata tacccttatt ttcatttcca acaactact 1950
 atgataaatg tgaagaagat tctgttttt tgtgacctat aataattata 2000
 caaacttcat gcaatgtact tgttctaagc aaattaaagc aaatatttat 2050
 ttaacattgt tactgaggat gtcaacatat aacaataaaa tataaatcac 2100
 cca 2103

<210> 106

<211> 423

<212> PRT

<213> Homo Sapien

<400> 106

Met Met Tyr Arg Pro Asp Val Val Arg Ala Arg Lys Arg Val Cys

1 5 10 15

Trp Glu Pro Trp Val Ile Gly Leu Val Ile Phe Ile Ser Leu Ile

20 25 30

Val Leu Ala Val Cys Ile Gly Leu Thr Val His Tyr Val Arg Tyr

Sequence Listing - P3230R1C1.txt

35	40	45
Asn Gln Lys Lys Thr Tyr Asn Tyr Tyr Ser Thr Leu Ser Phe Thr		
50	55	60
Thr Asp Lys Lys Leu Tyr Ala Glu Phe Gly Arg Glu Ala Ser Asn Asn		
65	70	75
Phe Thr Glu Met Ser Gln Arg Leu Glu Ser Met Val Lys Asn Ala		
80	85	90
Phe Tyr Lys Ser Pro Leu Arg Glu Glu Phe Val Lys Ser Gln Val		
95	100	105
Ile Lys Phe Ser Gln Gln Lys His Gly Val Leu Ala His Met Leu		
110	115	120
Leu Ile Cys Arg Phe His Ser Thr Glu Asp Pro Glu Thr Val Asp		
125	130	135
Lys Ile Val Gln Leu Val Leu His Glu Lys Leu Gln Asp Ala Val		
140	145	150
Gly Pro Pro Lys Val Asp Pro His Ser Val Lys Ile Lys Lys Ile		
155	160	165
Asn Lys Thr Glu Thr Asp Ser Tyr Leu Asn His Cys Cys Gly Thr		
170	175	180
Arg Arg Ser Lys Thr Leu Gly Gln Ser Leu Arg Ile Val Gly Gly		
185	190	195
Thr Glu Val Glu Glu Gly Glu Trp Pro Trp Gln Ala Ser Leu Gln		
200	205	210
Trp Asp Gly Ser His Arg Cys Gly Ala Thr Leu Ile Asn Ala Thr		
215	220	225
Trp Leu Val Ser Ala Ala His Cys Phe Thr Thr Tyr Lys Asn Pro		
230	235	240
Ala Arg Trp Thr Ala Ser Phe Gly Val Thr Ile Lys Pro Ser Lys		
245	250	255
Met Lys Arg Gly Leu Arg Arg Ile Ile Val His Glu Lys Tyr Lys		
260	265	270
His Pro Ser His Asp Tyr Asp Ile Ser Leu Ala Glu Leu Ser Ser		
275	280	285
Pro Val Pro Tyr Thr Asn Ala Val His Arg Val Cys Leu Pro Asp		
290	295	300
Ala Ser Tyr Glu Phe Gln Pro Gly Asp Val Met Phe Val Thr Gly		
305	310	315

Sequence Listing - P3230R1C1.txt

Phe Gly Ala Leu Lys Asn Asp Gly Tyr Ser Gln Asn His Leu Arg
320 325 330

Gln Ala Gln Val Thr Leu Ile Asp Ala Thr Thr Cys Asn Glu Pro
335 340 345

Gln Ala Tyr Asn Asp Ala Ile Thr Pro Arg Met Leu Cys Ala Gly
350 355 360

Ser Leu Glu Gly Lys Thr Asp Ala Cys Gln Gly Asp Ser Gly Gly
365 370 375

Pro Leu Val Ser Ser Asp Ala Arg Asp Ile Trp Tyr Leu Ala Gly
380 385 390

Ile Val Ser Trp Gly Asp Glu Cys Ala Lys Pro Asn Lys Pro Gly
395 400 405

Val Tyr Thr Arg Val Thr Ala Leu Arg Asp Trp Ile Thr Ser Lys
410 415 420

Thr Gly Ile

<210> 107

<211> 2397

<212> DNA

<213> Homo Sapien

<400> 107

agagaaagaa gcgtctccag ctgaagccaa tgcagccctc cggtctccg 50

cgaagaagtt cctgccccg atgagccccc gccgtgcgtc cccgactatc 100

cccaggcggg cgtggggcac cgggcccagc gccgacgac gctgccgttt 150

tgcccttggg agtaggatgt ggtgaaagga tggggcttct cccttacggg 200

gtcacaatg gccagagaag attccgtgaa gtgtctgcgc tgctgtctct 250

acgccctcaa tctgtcttt tggtaatgt ccatcagtgt gttggcagtt 300

tctgttga tgagggacta cctaataat gttctcactt taactgcaga 350

aacgagggta gaggaagcag tcattttgac ttactttct gtgttcac 400

cggatcatgat tgctgtttgc tgtttccta tcattgtggg gatgttaga 450

tattgtggaa cggtgaaaag aaatctgttg cttcttgcac ggtactttgg 500

aagtttgctt gtcattttct gtgtagaact ggcttgggc gtttgacat 550

atgaacagga acttatggtt ccagtacaat ggtcagatat ggtcactttg 600

Sequence Listing - P3230R1C1.txt

aaagccagga tgacaaatta tggattacct agatatcggg gccttactca 650
 tgcttggaat ttttttcaga gagagtttaa gtgctgtgga gtagtatatt 700
 tcactgactg gttggaaatg acagagatgg actggccccc agattcctgc 750
 tgtgttagag aattcccagg atgttccaaa caggcccacc aggaagatct 800
 cagtgcacctt tatcaagagg gttgtgggaa gaaaatgtat tcctttttga 850
 gaggaacca acaactgcag gtgctgaggt ttctgggaat ctccattggg 900
 gtgacacaaa tcctggccat gattctcacc attactctgc tctgggctct 950
 gtattatgat agaaggggagc ctgggacaga ccaaatgatg tccttgaaga 1000
 atgacaactc tcagcacctg tcatgtccct cagtagaact gttgaaacca 1050
 agcctgtcaa gaatctttga acacacatcc atggcaaaca gctttaatac 1100
 acactttgag atggaggagt tataaaaaga aatgtcacag aagaaaacca 1150
 caaactgttt ttattggact tgtgaatttt tgagtacata ctatgtgttt 1200
 cagaaatatg tagaataaaa aatgttgcca taaaataaca cctaagcata 1250
 tactattcta tgctttaaaa tgaggatgga aaagtttcat gtcataagtc 1300
 accacctgga caataattga tgcccttaaa atgctgaaga cagatgtcat 1350
 acccactgtg tagcctgtgt atgactttta ctgaacacag ttatgttttg 1400
 aggcagcatg gtttgattag catttccgca tccatgcaaa cgagtcacat 1450
 atggtgggac tggagccata gtaaaggttg atttacttct accaactagt 1500
 atataaagta ctaattaaat gctaacatag gaagttagaa aatactaata 1550
 acttttatta ctacgcgac tattcttctg atgctaaata aattatata 1600
 cagaaaactt tcaattattg tgactacct aatgtgattt ttgctggtta 1650
 ctaaaatatt cttaccactt aaaagagcaa gctaacacat tgtcttaagc 1700
 tgatcaggga tttttgtat ataagtctgt gttaaatctg tataattcag 1750
 tcgatttcag ttctgataa gtaagaata accattatga aaaggaaaat 1800
 ttgtcctgta tagcatcatt atttttagcc ttctctgtta ataaagcttt 1850
 actattctgt cctgggctta tattacacat ataactgtta tttaaatact 1900
 taaccactaa ttttgaaaat taccagtggt atacatagga atcattatct 1950
 agaatgtagt ctggctctta ggaagtatta ataagaaaat ttgcacataa 2000

Sequence Listing - P3230R1C1.txt

cttagttgat tcagaaagga cttgtatgct gttttctcc caaatgaaga 2050

ctctttttga cactaaacac ttttaaaaa gcttatcttt gccttctcca 2100

aacaagaagc aatagtctcc aagtcaatat aaattctaca gaaaatagtg 2150

ttctttttct ccagaaaaat gcttgtgaga atcattaaaa catgtgacaa 2200

tttagagatt cttgttttta ttctactgat taatatactg tggcaaatta 2250

cacagattat taaatttttt tacaagagta tagtatattt atttgaaatg 2300

ggaaaagtgc attttactgt attttgtgta tttgtttat ttctcagaat 2350

atggaaaagaa aattaaatg tgtcaataaa tattttctag agagtaa 2397

<210> 108

<211> 305

<212> PRT

<213> Homo Sapien

<400> 108

Met Ala Arg Glu Asp Ser Val Lys Cys Leu Arg Cys Leu Leu Tyr
1 5 10 15

Ala Leu Asn Leu Leu Phe Trp Leu Met Ser Ile Ser Val Leu Ala
20 25 30

Val Ser Ala Trp Met Arg Asp Tyr Leu Asn Asn Val Leu Thr Leu
35 40 45

Thr Ala Glu Thr Arg Val Glu Glu Ala Val Ile Leu Thr Tyr Phe
50 55 60

Pro Val Val His Pro Val Met Ile Ala Val Cys Cys Phe Leu Ile
65 70 75

Ile Val Gly Met Leu Gly Tyr Cys Gly Thr Val Lys Arg Asn Leu
80 85 90

Leu Leu Leu Ala Trp Tyr Phe Gly Ser Leu Leu Val Ile Phe Cys
95 100 105

Val Glu Leu Ala Cys Gly Val Trp Thr Tyr Glu Gln Glu Leu Met
110 115 120

Val Pro Val Gln Trp Ser Asp Met Val Thr Leu Lys Ala Arg Met
125 130 135

Thr Asn Tyr Gly Leu Pro Arg Tyr Arg Trp Leu Thr His Ala Trp
140 145 150

Asn Phe Phe Gln Arg Glu Phe Lys Cys Cys Gly Val Val Tyr Phe
155 160 165

Thr Asp Trp Leu Glu Met Thr Glu Met Asp Trp Pro Pro Asp Ser

Sequence Listing - P3230R1C1.txt

170	175	180
Cys Cys Val Arg Glu Phe Pro Gly Cys Ser Lys Gln Ala His Gln		
185	190	195
Glu Asp Leu Ser Asp Leu Tyr Gln Glu Gly Cys Gly Lys Lys Met		
200	205	210
Tyr Ser Phe Leu Arg Gly Thr Lys Gln Leu Gln Val Leu Arg Phe		
215	220	225
Leu Gly Ile Ser Ile Gly Val Thr Gln Ile Leu Ala Met Ile Leu		
230	235	240
Thr Ile Thr Leu Leu Trp Ala Leu Tyr Tyr Asp Arg Arg Glu Pro		
245	250	255
Gly Thr Asp Gln Met Met Ser Leu Lys Asn Asp Asn Ser Gln His		
260	265	270
Leu Ser Cys Pro Ser Val Glu Leu Leu Lys Pro Ser Leu Ser Arg		
275	280	285
Ile Phe Glu His Thr Ser Met Ala Asn Ser Phe Asn Thr His Phe		
290	295	300
Glu Met Glu Glu Leu		
305		

<210> 109

<211> 2339

<212> DNA

<213> Homo Sapien

<400> 109

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tctgataaag cccctaccag tgctgataaa gtctttctcg tgagagccta 100

gaggccctaa aaaaaaaagt gcttgaaaga gaaggggaca aaggaacacc 150

agtattaaga ggattttcca gtgtttctgg cagttgtgcc agaaggatgc 200

ctccattcct gctttctacc tgcctcttca tcacaggcac ctccgtgtca 250

cccgtggccc tagatccttg ttctgcttac atcagcctga atgagccctg 300

gaggaacact gaccaccagt tggatgagtc tcaaggtcct cctctatgtg 350

acaaccatgt gaatggggag tggaccact tcacgggcac ggcgggagat 400

gccatgccta cttctgcat accagaaaac cactgtggaa cccacgcacc 450

tgtctggctc aatggcagcc accccctaga aggcgacggc attgtgcaac 500

Sequence Listing - P3230R1C1.txt

gccaggcttg tgccagcttc aatgggaact gctgtctctg gaacaccacg 550
 gtggaagtca aggcttgccc tggagggtac tatgtgtatc gtctgacca 600
 gcccagcgtc tgcttcacg tctactgtgg tcattttat gacatctcg 650
 acgaggactg ccatggcagc tgctcagata ccagcgagtg cacatgcgt 700
 ccaggaactg tgctaggccc tgacaggcag acatgctttg atgaaaatga 750
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 ggagctcttc ctgaccaaca cctctgccg aggagtgccc aacggcacc 1100
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 gtgaatgaca agattgtggc cagcaacctc gtgacaggtc tacccaagca 1200
 gaccccgggg agcagcgggg acttcatcat ccgaaccagc aagctgtcta 1250
 tcccggtgac ctgcgagttt ccagcctgt acaccatttc tgaaggatac 1300
 gtccaacacc ttcgaaactc cccactggaa atcatgagcc gaaatcatgg 1350
 gatcttccca ttactctgag agatctcaa ggacaatgag tttgaagagc 1400
 cttaccggga agctctgccc accctcaagc ttcgtgactc cctctacttt 1450
 ggcattgagc ccgtggtgca cgtgagcggc ttggaagctg tggggagag 1500
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 cgggatcacc tagcaaagca ctccaggtc cctgtcttca agtttgggg 1650
 caagaccac aaggaagtgt ttctgcactg ccgggttctt gtctgtggag 1700
 tgttgacga gcgttcccg tgtgccagg gttgccaccg gcgaatcggt 1750
 cgtggggcag gaggagagga ctacgccggt ctacaggggc agacgctaac 1800
 aggcggcccg atccgcatcg actgggagga ctagtctcta gccatactc 1850
 gagtcctgc attggacggc tctgctcttt ggagctctc cccccaccg 1900

Sequence Listing - P3230R1C1.txt

cctctaagaa catctgcca cagctgggtt cagacttcac actgtgagtt 1950
cagactccca gcaccaactc actctgattc tggtcattc agtgggcaca 2000
gggcacagca ctgctgaaca atgtggcctg ggtgggggtt catctttcta 2050
gggttgaaaa ctaaactgtc caccagaaa gacactcacc ccatttcct 2100
cattttcttc ctacactaa atacctcgtg tatggtgcaa tcagaccaca 2150
aaatcagaag ctgggtataa tatttcaagt tacaaccct agaaaaatta 2200
aacagttact gaaattatga cttaaatacc caatgactcc ttaatatgt 2250
aaattatagt tataccttga aatttcaatt caaatgcaga ctaattatag 2300
ggaatttga agtgtatcaa taaaacagta tataatttt 2339

<210> 110

<211> 545

<212> PRT

<213> Homo Sapien

<400> 110

Met Pro Pro Phe Leu Leu Leu Thr Cys Leu Phe Ile Thr Gly Thr
1 5 10 15

Ser Val Ser Pro Val Ala Leu Asp Pro Cys Ser Ala Tyr Ile Ser
20 25 30

Leu Asn Glu Pro Trp Arg Asn Thr Asp His Gln Leu Asp Glu Ser
35 40 45

Gln Gly Pro Pro Leu Cys Asp Asn His Val Asn Gly Glu Trp Tyr
50 55 60

His Phe Thr Gly Met Ala Gly Asp Ala Met Pro Thr Phe Cys Ile
65 70 75

Pro Glu Asn His Cys Gly Thr His Ala Pro Val Trp Leu Asn Gly
80 85 90

Ser His Pro Leu Glu Gly Asp Gly Ile Val Gln Arg Gln Ala Cys
95 100 105

Ala Ser Phe Asn Gly Asn Cys Cys Leu Trp Asn Thr Thr Val Glu
110 115 120

Val Lys Ala Cys Pro Gly Gly Tyr Tyr Val Tyr Arg Leu Thr Lys
125 130 135

Pro Ser Val Cys Phe His Val Tyr Cys Gly His Phe Tyr Asp Ile
140 145 150

Cys Asp Glu Asp Cys His Gly Ser Cys Ser Asp Thr Ser Glu Cys

Sequence Listing - P3230R1C1.txt

155	160	165
Thr Cys Ala Pro Gly Thr Val Leu Gly Pro Asp Arg Gln Thr Cys		
170	175	180
Phe Asp Glu Asn Glu Cys Glu Gln Asn Asn Gly Gly Cys Ser Glu		
185	190	195
Ile Cys Val Asn Leu Lys Asn Ser Tyr Arg Cys Glu Cys Gly Val		
200	205	210
Gly Arg Val Leu Arg Ser Asp Gly Lys Thr Cys Glu Asp Val Glu		
215	220	225
Gly Cys His Asn Asn Asn Gly Gly Cys Ser His Ser Cys Leu Gly		
230	235	240
Ser Glu Lys Gly Tyr Gln Cys Glu Cys Pro Arg Gly Leu Val Leu		
245	250	255
Ser Glu Asp Asn His Thr Cys Gln Val Pro Val Leu Cys Lys Ser		
260	265	270
Asn Ala Ile Glu Val Asn Ile Pro Arg Glu Leu Val Gly Gly Leu		
275	280	285
Glu Leu Phe Leu Thr Asn Thr Ser Cys Arg Gly Val Ser Asn Gly		
290	295	300
Thr His Val Asn Ile Leu Phe Ser Leu Lys Thr Cys Gly Thr Val		
305	310	315
Val Asp Val Val Asn Asp Lys Ile Val Ala Ser Asn Leu Val Thr		
320	325	330
Gly Leu Pro Lys Gln Thr Pro Gly Ser Ser Gly Asp Phe Ile Ile		
335	340	345
Arg Thr Ser Lys Leu Leu Ile Pro Val Thr Cys Glu Phe Pro Arg		
350	355	360
Leu Tyr Thr Ile Ser Glu Gly Tyr Val Pro Asn Leu Arg Asn Ser		
365	370	375
Pro Leu Glu Ile Met Ser Arg Asn His Gly Ile Phe Pro Phe Thr		
380	385	390
Leu Glu Ile Phe Lys Asp Asn Glu Phe Glu Glu Pro Tyr Arg Glu		
395	400	405
Ala Leu Pro Thr Leu Lys Leu Arg Asp Ser Leu Tyr Phe Gly Ile		
410	415	420
Glu Pro Val Val His Val Ser Gly Leu Glu Ser Leu Val Glu Ser		
425	430	435

Sequence Listing - P3230R1C1.txt

Cys Phe Ala Thr Pro Thr Ser Lys Ile Asp Glu Val Leu Lys Tyr
 440 445 450
 Tyr Leu Ile Arg Asp Gly Cys Val Ser Asp Asp Ser Val Lys Gln
 455 460 465
 Tyr Thr Ser Arg Asp His Leu Ala Lys His Phe Gln Val Pro Val
 470 475 480
 Phe Lys Phe Val Gly Lys Asp His Lys Glu Val Phe Leu His Cys
 485 490 495
 Arg Val Leu Val Cys Gly Val Leu Asp Glu Arg Ser Arg Cys Ala
 500 505 510
 Gln Gly Cys His Arg Arg Met Arg Arg Gly Ala Gly Gly Glu Asp
 515 520 525
 Ser Ala Gly Leu Gln Gly Gln Thr Leu Thr Gly Gly Pro Ile Arg
 530 535 540
 Ile Asp Trp Glu Asp
 545

<210> 111

<211> 2063

<212> DNA

<213> Homo Sapien

<400> 111

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 caaggcctgc cctgcactcg ggcctctcc agccagtgc gaccagggac 100
 ttctgacctg ctggccagcc aggacctgtg tggggaggcc ctctgctgc 150
 ctgggggtga caatctcagc tcagggtac agggagaccg ggaggatcac 200
 agagccagca tgttacagga tcttgacagt gatcaacctc tgaacagcct 250
 cgatgtcaaa cccctgcgca aacccgtat ccccatggag accttcagaa 300
 aggtggggat ccccatcatc atagcactac tgagcctggc gagtatcatc 350
 attgtggttg tctcatcaa ggtgattctg gataaatact acttctctg 400
 cgggcagcct ctccacttca tccgaggaa gcagctgtgt gacggagagc 450
 tggactgtcc ctggggggag gacgaggagc actgtgtcaa gagcttcccc 500
 gaagggcctg cagtggcagt ccgcctctcc aaggaccgat ccactctgca 550
 ggtgctggag tcggccacag ggaactggtt ctctgctgtt ttcgacaact 600

Sequence Listing - P3230R1C1.txt

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gctgtggaga ttggcccaga ccaggatctg gatgtgttg aaatcacaga 700
aacagccag gagcttcgca tgcggaactc aagtgggcc tgtctctcag 750
gtcctctggt ctccctgcac tgtcttgct gtgggaagag cctgaagacc 800
ccccgtgtgg tgggtgggga ggaggcctct gtggattctt ggccttgga 850
ggtcagcatc cagtagcaca aacagcacgt ctgtggaggg agcatcctgg 900
acccccactg ggtcctcacg gcagccact gcttcaggaa acataccgat 950
gtgttcaact ggaagggtcg ggagggctca gacaaactgg gcagctccc 1000
atccctggct gtggccaaga tcatcatcat tgaattcaac cccatgtacc 1050
ccaaagacaa tgacatcgcc ctatgaagc tgcagttccc actcacttc 1100
tcaggcacag tcaggcccat ctgtctgccc ttctttgatg aggagctcac 1150
tcacgccacc ccactctgga tcattggatg gggctttacg aagcagaatg 1200
gaggggaagat gtctgacata ctgctgcagg cgtcagtcca ggtcattgac 1250
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gatgatgtgt gcaggcatcc cggaaggggg tgtggacacc tgccaggggt 1350
acagtggtag gccctgatg taccaatctg accagtggca tgtggtgggc 1400
atcgttagct ggggctatgg ctgcgggggc ccgagcacc caggagtata 1450
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aatcttccca cactactgaa tggaagcagg ctgtctgtga aaagcccaga 1850
tctactgtgg ctggagagga gaaggaaagg gtctgcgcca gccctgtccg 1900
tcttaccaca tccccagcc tactagagca agaaaccagt tgtaataaa 1950
aatgcactgc cctactgttg gtatgactac cgttacctac tgtgtcatt 2000

Sequence Listing - P3230R1C1.txt

gttattacag ctatggccac tattattaa gagctgtgta acatctctgg 2050

caaaaaaaaa aaa 2063

<210> 112

<211> 432

<212> PRT

<213> Homo Sapien

<400> 112

Met Leu Gln Asp Pro Asp Ser Asp Gln Pro Leu Asn Ser Leu Asp
1 5 10 15

Val Lys Pro Leu Arg Lys Pro Arg Ile Pro Met Glu Thr Phe Arg
20 25 30

Lys Val Gly Ile Pro Ile Ile Ile Ala Leu Leu Ser Leu Ala Ser
35 40 45

Ile Ile Ile Val Val Val Leu Ile Lys Val Ile Leu Asp Lys Tyr
50 55 60

Tyr Phe Leu Cys Gly Gln Pro Leu His Phe Ile Pro Arg Lys Gln
65 70 75

Leu Cys Asp Gly Glu Leu Asp Cys Pro Leu Gly Glu Asp Glu Glu
80 85 90

His Cys Val Lys Ser Phe Pro Glu Gly Pro Ala Val Ala Val Arg
95 100 105

Leu Ser Lys Asp Arg Ser Thr Leu Gln Val Leu Asp Ser Ala Thr
110 115 120

Gly Asn Trp Phe Ser Ala Cys Phe Asp Asn Phe Thr Glu Ala Leu
125 130 135

Ala Glu Thr Ala Cys Arg Gln Met Gly Tyr Ser Arg Ala Val Glu
140 145 150

Ile Gly Pro Asp Gln Asp Leu Asp Val Val Glu Ile Thr Glu Asn
155 160 165

Ser Gln Glu Leu Arg Met Arg Asn Ser Ser Gly Pro Cys Leu Ser
170 175 180

Gly Ser Leu Val Ser Leu His Cys Leu Ala Cys Gly Lys Ser Leu
185 190 195

Lys Thr Pro Arg Val Val Gly Gly Glu Glu Ala Ser Val Asp Ser
200 205 210

Trp Pro Trp Gln Val Ser Ile Gln Tyr Asp Lys Gln His Val Cys
215 220 225

Sequence Listing - P3230R1C1.txt

Gly Gly Ser Ile Leu Asp Pro His Trp Val Leu Thr Ala Ala His
 230 235 240

Cys Phe Arg Lys His Thr Asp Val Phe Asn Trp Lys Val Arg Ala
 245 250 255

Gly Ser Asp Lys Leu Gly Ser Phe Pro Ser Leu Ala Val Ala Lys
 260 265 270

Ile Ile Ile Ile Glu Phe Asn Pro Met Tyr Pro Lys Asp Asn Asp
 275 280 285

Ile Ala Leu Met Lys Leu Gln Phe Pro Leu Thr Phe Ser Gly Thr
 290 295 300

Val Arg Pro Ile Cys Leu Pro Phe Phe Asp Glu Glu Leu Thr Pro
 305 310 315

Ala Thr Pro Leu Trp Ile Ile Gly Trp Gly Phe Thr Lys Gln Asn
 320 325 330

Gly Gly Lys Met Ser Asp Ile Leu Leu Gln Ala Ser Val Gln Val
 335 340 345

Ile Asp Ser Thr Arg Cys Asn Ala Asp Asp Ala Tyr Gln Gly Glu
 350 355 360

Val Thr Glu Lys Met Met Cys Ala Gly Ile Pro Glu Gly Gly Val
 365 370 375

Asp Thr Cys Gln Gly Asp Ser Gly Gly Pro Leu Met Tyr Gln Ser
 380 385 390

Asp Gln Trp His Val Val Gly Ile Val Ser Trp Gly Tyr Gly Cys
 395 400 405

Gly Gly Pro Ser Thr Pro Gly Val Tyr Thr Lys Val Ser Ala Tyr
 410 415 420

Leu Asn Trp Ile Tyr Asn Val Trp Lys Ala Glu Leu
 425 430

<210> 113

<211> 1768

<212> DNA

<213> Homo Sapien

<400> 113

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aagtgctgtg gattataggt gtaagccacc gtgtctggcc tctgaacaac 100

ttttcagca actaaaaaag ccacaggagt tgaactgcta ggattctgac 150

Sequence Listing - P3230R1C1.txt

tatgtctgtg tggtagtgc tctactctt acctacatta aaatctgttt 200
 ttgtttctct tgaactagc ctttaccttc ctaacacaga ggaatgtca 250
 ctgtggctct gggccaaacc tgacctcac tctggaacga gaacagaggt 300
 ttctaccac accgtccct cgaagccggg gacagcctca cctgtctggc 350
 ctctcgtgg agcagtgtcc tcaccaactg tctcacgtct ggaggcactg 400
 actcgggcag tgcaggtagc tgagcctctt ggtagctgcg gctttcaagg 450
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 ccctggggc aggacgggccc gtggacacct gctcagaagc agtgggtgag 600
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 atccatgggc taatctgaac tctgtccaa ggaaccaga gcttgagtga 700
 gctgtggctc agaccagaa ggggtctgt tagaccacct ggttatgtg 750
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 gtgagcaggga aggaactgt gccaaattat gggtcagaaa agatggaggt 850
 gtgtgggttat cacaaggcat cgagtctct gcattcagt gacatgtggg 900
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 ctccctctt tcctctgag aggcctctc atgtcctac taaagccacc 1150
 agcaagacat agctgacagg ggctaattgc tcagtgttg cccaggaggt 1200
 cagcaaggcc tgagagctga tcagaagggc ctgctgtgc aacacggaaa 1250
 tgctctcagt aagcacaggc tgcaaaatcc ccaggcaaag gactgtgtgg 1300
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 agctagagct tggttcaat gatctcaag gcccttata cccaggaga 1400
 ctttgatttg aatttgaac cccaatcca aacctaagaa ccaggtgtcat 1450
 taagaatcag ttattgccg gtgtgtgtgg ctgtaatgcc aacattttgg 1500
 gaggccgagg cgggtagatc acctgaggtc aggagtcaa gaccagcctg 1550

Sequence Listing - P3230R1C1.txt

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 aggcattggt gtgtgtgcct gtatcccagc tactcgggag gctgagacag 1650
 gagaattact tgaacctggg aggtgaagga ggctgagaca ggagaatcac 1700
 ttacgcctga gcaacacagc gagactctgt ctcagaaaaa ataaaaaaag 1750
 aattatggtt atttgtaa 1768

<210> 114
 <211> 109
 <212> PRT
 <213> Homo Sapien

<400> 114
 Met Leu Trp Trp Leu Val Leu Leu Leu Leu Pro Thr Leu Lys Ser
 1 5 10 15
 Val Phe Cys Ser Leu Val Thr Ser Leu Tyr Leu Pro Asn Thr Glu
 20 25 30
 Asp Leu Ser Leu Trp Leu Trp Pro Lys Pro Asp Leu His Ser Gly
 35 40 45
 Thr Arg Thr Glu Val Ser Thr His Thr Val Pro Ser Lys Pro Gly
 50 55 60
 Thr Ala Ser Pro Cys Trp Pro Leu Ala Gly Ala Val Pro Ser Pro
 65 70 75
 Thr Val Ser Arg Leu Glu Ala Leu Thr Arg Ala Val Gln Val Ala
 80 85 90
 Glu Pro Leu Gly Ser Cys Gly Phe Gln Gly Gly Pro Cys Pro Gly
 95 100 105
 Arg Arg Arg Asp

<210> 115
 <211> 1197
 <212> DNA
 <213> Homo Sapien

<400> 115
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 gagagaccat ggcaaagaat cctccagaga attgtgaaga ctgtcacatt 100
 ctaaatgcag aagcttttaa atccaagaaa atatgtaaat cacttaagat 150
 ttgtggactg gtgttttgta tctggccct aactctaatt gtctgtttt 200
 gggggagcaa gcacttctgg ccggagggtac ccaaaaaagc ctatgacatg 250

Sequence Listing - P3230R1C1.txt

gagcacactt tctacagcaa tggagagaag aagaagattt acatggaaat 300
tgactctgtg accagaactg aaatattcag aagcggaat ggactctgatg 350
aaacattgga agtgcacgac tttaaaaacg gatactctgg catctacttc 400
gtgggtcttc aaaaatgttt tatcaaaact cagattaaag tgattctga 450
attttctgaa ccagaagagg aaatagatga gaatgaagaa attaccacaa 500
ctttcttga acagtcagtg attgggtcc cagcagaaaa gcctattgaa 550
aaccgagatt ttcttaaaaa ttcaaaatt ctggagattt gtgataacgt 600
gacctgtat tggatcaatc cactctaat atcagtttct gagttacaag 650
actttgagga ggaggggagaa gatcttcact tctctgccaa cgaaaaaaaa 700
gggattgaac aaaatgaaca gtgggtggtc cctcaagtga aagtagagaa 750
gacccgtcac gccagacaag caagtggagga agaactcca ataatgact 800
atactgaaaa tggaaatgaa ttgatccca tgctggatga gagaggttat 850
tgttgatttt actgccgtcg aggcaaccgc tattgccgcc gcgtctgtga 900
acctttacta ggctactacc catatccata ctgctacca ggagagcagag 950
tcatctgtcg tgtcatcatg ccttgtaact ggtgggtggc cgcgatgctg 1000
gggaggggtc aataggaggt ttgagctcaa atgcttaaac tgctggcaac 1050
atataataaa tgcagtctat tcaatgaatt tctgcctatg aggcactctg 1100
cccctggtag ccagctctcc agaattactt gtaggtaatt cctctcttca 1150
tgttctaata aactctaca ttatcaccaa aaaaaaaaaa aaaaaa 1197

<210> 116

<211> 317

<212> PRT

<213> Homo Sapien

<400> 116

Met Ala Lys Asn Pro Pro Glu Asn Cys Glu Asp Cys His Ile Leu
1 5 10 15

Asn Ala Glu Ala Phe Lys Ser Lys Lys Ile Cys Lys Ser Leu Lys
20 25 30

Ile Cys Gly Leu Val Phe Gly Ile Leu Ala Leu Thr Leu Ile Val
35 40 45

Leu Phe Trp Gly Ser Lys His Phe Trp Pro Glu Val Pro Lys Lys

Sequence Listing - P3230R1C1.txt

50	55	60
Ala Tyr Asp Met Glu His Thr Phe Tyr Ser Asn Gly Glu Lys Lys		
65	70	75
Lys Ile Tyr Met Glu Ile Asp Pro Val Thr Arg Thr Glu Ile Phe		
80	85	90
Arg Ser Gly Asn Gly Thr Asp Glu Thr Leu Glu Val His Asp Phe		
95	100	105
Lys Asn Gly Tyr Thr Gly Ile Tyr Phe Val Gly Leu Gln Lys Cys		
110	115	120
Phe Ile Lys Thr Gln Ile Lys Val Ile Pro Glu Phe Ser Glu Pro		
125	130	135
Glu Glu Glu Ile Asp Glu Asn Glu Glu Ile Thr Thr Thr Phe Phe		
140	145	150
Glu Gln Ser Val Ile Trp Val Pro Ala Glu Lys Pro Ile Glu Asn		
155	160	165
Arg Asp Phe Leu Lys Asn Ser Lys Ile Leu Glu Ile Cys Asp Asn		
170	175	180
Val Thr Met Tyr Trp Ile Asn Pro Thr Leu Ile Ser Val Ser Glu		
185	190	195
Leu Gln Asp Phe Glu Glu Glu Gly Glu Asp Leu His Phe Pro Ala		
200	205	210
Asn Glu Lys Lys Gly Ile Glu Gln Asn Glu Gln Trp Val Val Pro		
215	220	225
Gln Val Lys Val Glu Lys Thr Arg His Ala Arg Gln Ala Ser Glu		
230	235	240
Glu Glu Leu Pro Ile Asn Asp Tyr Thr Glu Asn Gly Ile Glu Phe		
245	250	255
Asp Pro Met Leu Asp Glu Arg Gly Tyr Cys Cys Ile Tyr Cys Arg		
260	265	270
Arg Gly Asn Arg Tyr Cys Arg Arg Val Cys Glu Pro Leu Leu Gly		
275	280	285
Tyr Tyr Pro Tyr Pro Tyr Cys Tyr Gln Gly Gly Arg Val Ile Cys		
290	295	300
Arg Val Ile Met Pro Cys Asn Trp Trp Val Ala Arg Met Leu Gly		
305	310	315
Arg Val		

Sequence Listing - P3230R1C1.txt

<210> 117

<211> 2121

<212> DNA

<213> Homo Sapien

<400> 117

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cacatgccaa gtggtggcgt tcctcctgtc cctcctggg ctggccggct 150
gcatcgggc caccgggatg gacatgtgga gcaccagga cctgtacgac 200
aaccctgta cctcctgtt ccagtacgaa gggctctgga ggagctgcgt 250
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gacttcacg catgctgcag gcagtgcgag ccctgatgat cgtaggcatc 350
gtcctgggtg ccattggcct cctggtatcc atctttgcc tgaatgcat 400
ccgattggc agcatggagg actctgcaa agccaacatg acactgacct 450
ccgggatcat gttcattgct tcaggctttt gtgcaattgc tggagtgtct 500
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tcctccaag cagcactatg tgtaatgctc taagacctct cagcacgggc 900
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atttctctt gcttttgact cacagctgga agttagaaaa gctctgatt 1000
catctttgga gaggccaaat ggtcttagcc tcagtctctg tctctaaata 1050
ttccaccata aaacagctga gttatttatg aattagaggc tatagctcac 1100
attttcaatc ctctattctt tttttaaat ataactttct actctgatga 1150
gagaatgtgg ttttaatctc tctctcacat tttgatgatt tagacagact 1200

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Sequence Listing - P3230R1C1.txt

ccccctcttc ctctagtca ataaacccat tgatgatcta ttcccagct 1250
 tatccccaag aaaacttttg aaaggaaaga gtagaccaa agatgttatt 1300
 ttctgtgtt tgaattttgt ctccccacc ccaacttggc tagtaataaa 1350
 cacttactga agaagaagca ataagagaaa gatatttga atctctccag 1400
 cccatgatct cgtttttctt acactgtgat cttaaaagt accaaaccaa 1450
 agtcatttct agtttgaggc aaccaaacct ttctactgct gttgacatct 1500
 tcttattaca gcaacacat tctaggagtt tctgagctc tccactggag 1550
 tctctttct gtcgcgggtc agaaattgtc cctagatgaa tgagaaatt 1600
 atttttttta atttaagtc taaatatagt taaaataaat aatgttttag 1650
 taaatgata cactatctct gtgaaatagc ctccaccta catgtggata 1700
 gaaggaaatg aaaaaataat tgctttgaca ttgtctatat ggtactttgt 1750
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 agcactttgg gaggtctgagg aggaaggatc actgagccc agaagttcga 1850
 gactagcctg ggcaacatgg agaagccctg tctctacaaa atacagagag 1900
 aaaaaatcag ccagtcatgg tggcatacac ctgtagtccc agcattccgg 1950
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 gagccatgat cacaccatg cactccagcc aggtgacata gcgagatcct 2050
 gtctaaaaaa ataaaaaata aataatggaa cacagcaagt cctaggaagt 2100
 aggttaaac taattcttta a 2121

<210> 118

<211> 261

<212> PRT

<213> Homo Sapien

<400> 118

Met Ser Thr Thr Thr Cys Gln Val Val Ala Phe Leu Leu Ser Ile
 1 5 10 15

Leu Gly Leu Ala Gly Cys Ile Ala Ala Thr Gly Met Asp Met Trp
 20 25 30

Ser Thr Gln Asp Leu Tyr Asp Asn Pro Val Thr Ser Val Phe Gln
 35 40 45

Tyr Glu Gly Leu Trp Arg Ser Cys Val Arg Gln Ser Ser Gly Phe
 50 55 60

Sequence Listing - P3230R1C1.txt

Thr Glu Cys Arg Pro Tyr Phe Thr Ile Leu Gly Leu Pro Ala Met
65 70 75

Leu Gln Ala Val Arg Ala Leu Met Ile Val Gly Ile Val Leu Gly
80 85 90

Ala Ile Gly Leu Leu Val Ser Ile Phe Ala Leu Lys Cys Ile Arg
95 100 105

Ile Gly Ser Met Glu Asp Ser Ala Lys Ala Asn Met Thr Leu Thr
110 115 120

Ser Gly Ile Met Phe Ile Val Ser Gly Leu Cys Ala Ile Ala Gly
125 130 135

Val Ser Val Phe Ala Asn Met Leu Val Thr Asn Phe Trp Met Ser
140 145 150

Thr Ala Asn Met Tyr Thr Gly Met Gly Gly Met Val Gln Thr Val
155 160 165

Gln Thr Arg Tyr Thr Phe Gly Ala Ala Leu Phe Val Gly Trp Val
170 175 180

Ala Gly Gly Leu Thr Leu Ile Gly Gly Val Met Met Cys Ile Ala
185 190 195

Cys Arg Gly Leu Ala Pro Glu Glu Thr Asn Tyr Lys Ala Val Ser
200 205 210

Tyr His Ala Ser Gly His Ser Val Ala Tyr Lys Pro Gly Gly Phe
215 220 225

Lys Ala Ser Thr Gly Phe Gly Ser Asn Thr Lys Asn Lys Lys Ile
230 235 240

Tyr Asp Gly Gly Ala Arg Thr Glu Asp Glu Val Gln Ser Tyr Pro
245 250 255

Ser Lys His Asp Tyr Val
260

<210> 119

<211> 2010

<212> DNA

<213> Homo Sapien

<400> 119

ggaaaaaactg ttcttctctg tggcacagag aacctgctt caaagcagaa 50

gtagcagttc cggagtcag ctggctaaaa ctcatcccag aggataatgg 100

caaccatgc ctagaaatc gctgggctgt ttcttggtg tggtggaatg 150

Sequence Listing - P3230R1C1.txt

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 tcctctctgg ctctttctcc ggacctacag gcagccagag gactgatgtg 350
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 tactccagaa gtcagtatgt gtagttgtgt atgtttttt aactttacta 800
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 tatgtacata gatgagtgt acatttatat ctacacataga gacatgctta 1150
 tatggtttta tttaaaatga aatgccagtc cattacactg aataaataga 1200
 actcaactat tgcttttcag ggaaatcatg gatagggttg aagaaggtta 1250
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 ttaaaacgca gatattttgt caaggggctt tgcattcaaa ctgcttttc 1500
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Sequence Listing - P3230R1C1.txt

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gagtacagac ttgaggttt catcaatata aataaaagag cagaaaaata 1700
tgtcttggtt ttcatttgct taccaaaaaa acaacaacaa aaaaagttgt 1750
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aatgaatgtg ttctatttgc ttatacatt tatattaata aattgtacat 2000
tttctaatt 2010

<210> 120

<211> 225

<212> PRT

<213> Homo Sapien

<400> 120

Met Ala Thr His Ala Leu Glu Ile Ala Gly Leu Phe Leu Gly Gly
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Val Gly Met Val Gly Thr Val Ala Val Thr Val Met Pro Gln Trp
20 25 30

Arg Val Ser Ala Phe Ile Glu Asn Asn Ile Val Val Phe Glu Asn
35 40 45

Phe Trp Glu Gly Leu Trp Met Asn Cys Val Arg Gln Ala Asn Ile
50 55 60

Arg Met Gln Cys Lys Ile Tyr Asp Ser Leu Leu Ala Leu Ser Pro
65 70 75

Asp Leu Gln Ala Ala Arg Gly Leu Met Cys Ala Ala Ser Val Met
80 85 90

Ser Phe Leu Ala Phe Met Met Ala Ile Leu Gly Met Lys Cys Thr
95 100 105

Arg Cys Thr Gly Asp Asn Glu Lys Val Lys Ala His Ile Leu Leu
110 115 120

Thr Ala Gly Ile Ile Phe Ile Ile Thr Gly Met Val Val Leu Ile
125 130 135

Pro Val Ser Trp Val Ala Asn Ala Ile Ile Arg Asp Phe Tyr Asn

Sequence Listing - P3230R1C1.txt

140	145	150
Ser Ile Val Asn Val Ala Gln Lys Arg Glu Leu Gly Glu Ala Leu		
155	160	165
Tyr Leu Gly Trp Thr Thr Ala Leu Val Leu Ile Val Gly Gly Ala		
170	175	180
Leu Phe Cys Cys Val Phe Cys Cys Asn Glu Lys Ser Ser Ser Tyr		
185	190	195
Arg Tyr Ser Ile Pro Ser His Arg Thr Thr Gln Lys Ser Tyr His		
200	205	210
Thr Gly Lys Lys Ser Pro Ser Val Tyr Ser Arg Ser Gln Tyr Val		
215	220	225

<210> 121

<211> 1257

<212> DNA

<213> Homo Sapien

<400> 121

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 ctgcagctgc ccgcgccgtc gagcgcctct gagatccca aggggaagca 250
 aaaggcgcag ctccgcgaga gggaggtggt ggacctgtat aatggaatgt 300
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 agaaaaaggg gaatgtctga gggaaagcct tgaggagtcc tgacacca 450
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 aaaattgcgg agtgtacatt tacaagatg cggtcaata gtgctctaag 550
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 agcgttggtg ttccacattc aatggagctg aatgttcagg acctctccc 650
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 aattaatatt catgcactt cttctgtgga aggactttgt gaaggaaatt 750
 gtgctggatt agtggatgtt gctatctggg ttggcacttg tcagattac 800

Sequence Listing - P3230R1C1.txt

ccaaaaggag atgcttctac tggatggaat tcagtttctc gcatcattat 850

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ttattatgcc ttggaatggt tcacttaaat gacattttaa ataagtttat 950
gtatatactc gaatgaaaag caaagctaaa tatgtttaca gaccaaagtg 1000

tgatttcaca ctgtttttaa atctagcatt attcattttg cttcaatcaa 1050

aagtgggttc aatattttt ttagtgggtt agaatacttt cttcatagtc 1100

acattctctc aacctataat ttggaatatt gttgtggtct tttgttttt 1150

ctcttagtat agcattttta aaaaaatata aaagctacca atctttgtac 1200

aatttgttaa tgttaagaat ttttttata tctgttaaat aaaaattatt 1250

tccaaca 1257

<210> 122

<211> 243

<212> PRT

<213> Homo Sapien

<400> 122

Met Arg Pro Gln Gly Pro Ala Ala Ser Pro Gln Arg Leu Arg Gly
1 5 10 15

Leu Leu Leu Leu Leu Leu Gln Leu Pro Ala Pro Ser Ser Ala
20 25 30

Ser Glu Ile Pro Lys Gly Lys Gln Lys Ala Gln Leu Arg Gln Arg
35 40 45

Glu Val Val Asp Leu Tyr Asn Gly Met Cys Leu Gln Gly Pro Ala
50 55 60

Gly Val Pro Gly Arg Asp Gly Ser Pro Gly Ala Asn Val Ile Pro
65 70 75

Gly Thr Pro Gly Ile Pro Gly Arg Asp Gly Phe Lys Gly Glu Lys
80 85 90

Gly Glu Cys Leu Arg Glu Ser Phe Glu Glu Ser Trp Thr Pro Asn
95 100 105

Tyr Lys Gln Cys Ser Trp Ser Ser Leu Asn Tyr Gly Ile Asp Leu
110 115 120

Gly Lys Ile Ala Glu Cys Thr Phe Thr Lys Met Arg Ser Asn Ser
125 130 135

Ala Leu Arg Val Leu Phe Ser Gly Ser Leu Arg Leu Lys Cys Arg
140 145 150

Sequence Listing - P3230R1C1.txt

Asn Ala Cys Cys Gln Arg Trp Tyr Phe Thr Phe Asn Gly Ala Glu
 155 160 165

Cys Ser Gly Pro Leu Pro Ile Glu Ala Ile Ile Tyr Leu Asp Gln
 170 175 180

Gly Ser Pro Glu Met Asn Ser Thr Ile Asn Ile His Arg Thr Ser
 185 190 195

Ser Val Glu Gly Leu Cys Glu Gly Ile Gly Ala Gly Leu Val Asp
 200 205 210

Val Ala Ile Trp Val Gly Thr Cys Ser Asp Tyr Pro Lys Gly Asp
 215 220 225

Ala Ser Thr Gly Trp Asn Ser Val Ser Arg Ile Ile Ile Glu Glu
 230 235 240

Leu Pro Lys

<210> 123
 <211> 2379
 <212> DNA
 <213> Homo Sapien

<400> 123
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 atacagatgt ggcagctcag gtagcccaa attgcttggga agaatacatc 150
 atgtttttcg ataagaagaa attgtaggat ccagtttttt tttaaccgc 200
 cccctcccca cccccaaaa aaactgtaaa gatgcaaaaa cgtaatatcc 250
 atgaagatcc tattacctag gaagattttg atgttttctc gcgaatgagg 300
 tgttgggatt tattgttct tggagtgttc tgcgtggctg gcaagaata 350
 atgttccaaa atcgggtccat ctccaagggt gtccaatttt tcttctggg 400
 tgtcagcgag ccctgactca ctacagtga gctgacaggg gctgtcatgc 450
 aactggcccc taagccaaag caaaagacct aaggacgacc ttgaacaat 500
 acaaaggatg ggtttcaatg taattaggct actgagcgga tcagctgtag 550
 cactggttat agccccact gtcttactga caatgtcttc ttctgccgaa 600
 cgaggatgcc ctaagggtct taggtgtgaa ggcaaatgg tatattgtga 650
 atctcagaaa ttacaggaga taccctcaag tatatctgct gggttgcttag 700

Sequence Listing - P3230R1C1.txt

gtttgcctt tcgtataac agccttcaaa aacttaagta taatcaatt 750
aaagggctca accagctcac ctggctatac ctgaccata accatatcag 800
caatattgac gaaaatgctt ttaatggaat acgcagactc aaagagctga 850
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cagaaccttt actgacgtg gaataaaatc agtgtcatag gacagaccat 1250
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aaagacagtc cctaagcaa atgactccca gcacccagga attttatgta 1950
gattataaac ccaccaacac ggagaccagc gagatgctgc tgaatgggac 2000
gggaccctgc acctataaca aatcgggctc cagggagtggt gaggtatgaa 2050
ccattgtgat aaaaagagct ctaaaagct gggaaataag tgggtcttta 2100

Sequence Listing - P3230R1C1.txt

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tctccctctc actttgggtg caagatcctt ccttgccgt tttagtcat 2200

tcataatact ggtcattttc ctctcatata taatcaaccc attgaaatt 2250

aaataccaca atcaatgtga agcttgaact ccggtttaat ataataccta 2300

tgtataaga ccccttactg attccattaa tgcgcattt gttttaagat 2350

aaaactcttt tcataggtaa aaaaaaaaa 2379

<210> 124

<211> 513

<212> PRT

<213> Homo Sapien

<400> 124

Met Gly Phe Asn Val Ile Arg Leu Leu Ser Gly Ser Ala Val Ala

1 5 10 15
Leu Val Ile Ala Pro Thr Val Leu Leu Thr Met Leu Ser Ser Ala
20 25 30

Glu Arg Gly Cys Pro Lys Gly Cys Arg Cys Glu Gly Lys Met Val
35 40 45

Tyr Cys Glu Ser Gln Lys Leu Gln Glu Ile Pro Ser Ser Ile Ser
50 55 60

Ala Gly Cys Leu Gly Leu Ser Leu Arg Tyr Asn Ser Leu Gln Lys
65 70 75

Leu Lys Tyr Asn Gln Phe Lys Gly Leu Asn Gln Leu Thr Trp Leu
80 85 90

Tyr Leu Asp His Asn His Ile Ser Asn Ile Asp Glu Asn Ala Phe
95 100 105

Asn Gly Ile Arg Arg Leu Lys Glu Leu Ile Leu Ser Ser Asn Arg
110 115 120

Ile Ser Tyr Phe Leu Asn Asn Thr Phe Arg Pro Val Thr Asn Leu
125 130 135

Arg Asn Leu Asp Leu Ser Tyr Asn Gln Leu His Ser Leu Gly Ser
140 145 150

Glu Gln Phe Arg Gly Leu Arg Lys Leu Leu Ser Leu His Leu Arg
155 160 165

Ser Asn Ser Leu Arg Thr Ile Pro Val Arg Ile Phe Gln Asp Cys
170 175 180

Arg Asn Leu Glu Leu Leu Asp Leu Gly Tyr Asn Arg Ile Arg Ser
185 190 195

Sequence Listing - P3230R1C1.txt

Leu Ala Arg Asn Val Phe Ala Gly Met Ile Arg Leu Lys Glu Leu
 200 205 210
 His Leu Glu His Asn Gln Phe Ser Lys Leu Asn Leu Ala Leu Phe
 215 220 225
 Pro Arg Leu Val Ser Leu Gln Asn Leu Tyr Leu Gln Trp Asn Lys
 230 235 240
 Ile Ser Val Ile Gly Gln Thr Met Ser Trp Thr Trp Ser Ser Leu
 245 250 255
 Gln Arg Leu Asp Leu Ser Gly Asn Glu Ile Glu Ala Phe Ser Gly
 260 265 270
 Pro Ser Val Phe Gln Cys Val Pro Asn Leu Gln Arg Leu Asn Leu
 275 280 285
 Asp Ser Asn Lys Leu Thr Phe Ile Gly Gln Glu Ile Leu Asp Ser
 290 295 300
 Trp Ile Ser Leu Asn Asp Ile Ser Leu Ala Gly Asn Ile Trp Glu
 305 310 315
 Cys Ser Arg Asn Ile Cys Ser Leu Val Asn Trp Leu Lys Ser Phe
 320 325 330
 Lys Gly Leu Arg Glu Asn Thr Ile Ile Cys Ala Ser Pro Lys Glu
 335 340 345
 Leu Gln Gly Val Asn Val Ile Asp Ala Val Lys Asn Tyr Ser Ile
 350 355 360
 Cys Gly Lys Ser Thr Thr Glu Arg Phe Asp Leu Ala Arg Ala Leu
 365 370 375
 Pro Lys Pro Thr Phe Lys Pro Lys Leu Pro Arg Pro Lys His Glu
 380 385 390
 Ser Lys Pro Pro Leu Pro Pro Thr Val Gly Ala Thr Glu Pro Gly
 395 400 405
 Pro Glu Thr Asp Ala Asp Ala Glu His Ile Ser Phe His Lys Ile
 410 415 420
 Ile Ala Gly Ser Val Ala Leu Phe Leu Ser Val Leu Val Ile Leu
 425 430 435
 Leu Val Ile Tyr Val Ser Trp Lys Arg Tyr Pro Ala Ser Met Lys
 440 445 450
 Gln Leu Gln Gln Arg Ser Leu Met Arg Arg His Arg Lys Lys Lys
 455 460 465

Sequence Listing - P3230R1C1.txt

Arg	Gln	Ser	Leu	Lys	Gln	Met	Thr	Pro	Ser	Thr	Gln	Glu	Phe	Tyr
		470				475					480			
Val	Asp	Tyr	Lys	Pro	Thr	Asn	Thr	Glu	Thr	Ser	Glu	Met	Leu	Leu
		485				490					495			
Asn	Gly	Thr	Gly	Pro	Cys	Thr	Tyr	Asn	Lys	Ser	Gly	Ser	Arg	Glu
		500				505					510			
Cys	Glu	Val												

<210> 125

<211> 998

<212> DNA

<213> Homo Sapien

<400> 125

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aggcttttgc cgctgaccca gagatggccc cgagcgagca aattcctact 100
gtccggctgc gcggctaccg tggccgagct agcaaccttt cccctggatc 150
tcacaaaaac tcgactccaa atgcaaggag aagcagctct gtctcggttg 200
ggagacggtg caagagaatc tgccccctat aggggaatgg tgcgcacagc 250
cctaggggatc attgaagagg aaggctttct aaagctttgg caaggagtga 300
caccgccat ttacagacac gtagtgtatt ctggaggctg aatggtcaca 350
tatgaacatc tccgagaggt tgtgtttggc aaaagtgaa atgagcatta 400
tccccttgg aaatcagtc ttggagggat gatggctggt gtattggcc 450
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tgcatctgca aaaatcttag ctgaaggagg aatacgaggg ctttggcgag 600
gctgggtacc caatatacaa agagcagcac tggtaatat gggagattta 650
accacttatg atacagtga acactactg gtattgaata caccacttga 700
ggacaatatc atgactcacg gtttatcaag ttatgttct ggactggtag 750
cttcattctt gggaacacca gccgatgtca tcaaagcag aataatgaat 800
caaccacgag ataacaagg aaggggactt ttgtataat catcgactga 850
ctgttgattc caggctgttc aagggtgaagg attcatgagt ctatataag 900
gctttttacc atcttggtg agaatgaccc cttggtcaat ggtgttctgg 950

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Sequence Listing - P3230R1C1.txt

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<210> 126

<211> 323

<212> PRT

<213> Homo Sapien

<400> 126

Met Ser Val Pro Glu Glu Glu Glu Arg Leu Leu Pro Leu Thr Gln
1 5 10 15

Arg Trp Pro Arg Ala Ser Lys Phe Leu Leu Ser Gly Cys Ala Ala
20 25 30

Thr Val Ala Glu Leu Ala Thr Phe Pro Leu Asp Leu Thr Lys Thr
35 40 45

Arg Leu Gln Met Gln Gly Glu Ala Ala Leu Ala Arg Leu Gly Asp
50 55 60

Gly Ala Arg Glu Ser Ala Pro Tyr Arg Gly Met Val Arg Thr Ala
65 70 75

Leu Gly Ile Ile Glu Glu Glu Gly Phe Leu Lys Leu Trp Gln Gly
80 85 90

Val Thr Pro Ala Ile Tyr Arg His Val Val Tyr Ser Gly Gly Arg
95 100 105

Met Val Thr Tyr Glu His Leu Arg Glu Val Val Phe Gly Lys Ser
110 115 120

Glu Asp Glu His Tyr Pro Leu Trp Lys Ser Val Ile Gly Gly Met
125 130 135

Met Ala Gly Val Ile Gly Gln Phe Leu Ala Asn Pro Thr Asp Leu
140 145 150

Val Lys Val Gln Met Gln Met Glu Gly Lys Arg Lys Leu Glu Gly
155 160 165

Lys Pro Leu Arg Phe Arg Gly Val His His Ala Phe Ala Lys Ile
170 175 180

Leu Ala Glu Gly Gly Ile Arg Gly Leu Trp Ala Gly Trp Val Pro
185 190 195

Asn Ile Gln Arg Ala Ala Leu Val Asn Met Gly Asp Leu Thr Thr
200 205 210

Tyr Asp Thr Val Lys His Tyr Leu Val Leu Asn Thr Pro Leu Glu
215 220 225

Asp Asn Ile Met Thr His Gly Leu Ser Ser Leu Cys Ser Gly Leu
230 235 240

Sequence Listing - P3230R1C1.txt

Val Ala Ser Ile Leu Gly Thr Pro Ala Asp Val Ile Lys Ser Arg
 245 250 255

Ile Met Asn Gln Pro Arg Asp Lys Gln Gly Arg Gly Leu Leu Tyr
 260 265 270

Lys Ser Ser Thr Asp Cys Leu Ile Gln Ala Val Gln Gly Glu Gly
 275 280 285

Phe Met Ser Leu Tyr Lys Gly Phe Leu Pro Ser Trp Leu Arg Met
 290 295 300

Thr Pro Trp Ser Met Val Phe Trp Leu Thr Tyr Glu Lys Ile Arg
 305 310 315

Glu Met Ser Gly Val Ser Pro Phe
 320

<210> 127

<211> 1505

<212> DNA

<213> Homo Sapien

<400> 127

cgcgatcgg acccaagcag gtcggcggcg gcggcaggag agcgccggg 50

cgtagctcc tcgacccccg tgtcgggcta gtccagcgag gcggacgggc 100

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gcgctggtga cgggggcctc ggggggcacg ggcgcggccg tggccggggc 200

cctggtccag cagggactga aggtggtggg ctgcgccgc actgtgggca 250

acatcagga gctggctgct gaatgtaaga gtgcaggcta ccccgggact 300

ttgatccct acagatgta cctatcaat gaagaggaca tctctccat 350

gttctcagct atccgttctc agcacagcgg ttagacatc tgcataaca 400

atgctggctt ggccggcct gacaccctgc ttcaggcag caccagtgt 450

tgaagagaca tgttcaatgt gaacgtgctg gccctcagca tctgcacag 500

ggaagcctac cagtccatga aggagcggaa tgtggacgat gggcacatca 550

ttaacatcaa tagcatgtct ggccaccgag tgttaccct gtctgtgacc 600

cacttctata gtgccaccaa gtatgccgtc actgcgctga cagagggact 650

gaggcaagag cttcgggag ccagaccca catccgagcc acgtgcatct 700

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cctgagaagg cagctgccac ctatgagcaa atgaagtgtc tcaaacccga 800

Sequence Listing - P3230R1C1.txt

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 atccctcac tctgactctg actatggcag cagaacacca gggcctggcc 1450
 cagtggattt catggtgatc attaaaaaag aaaaatcgca accaaaaaaa 1500
 aaaa 1505

<210> 128

<211> 260

<212> PRT

<213> Homo Sapien

<400> 128

Met Ala Arg Pro Gly Met Glu Arg Trp Arg Asp Arg Leu Ala Leu
 1 5 10 15

Val Thr Gly Ala Ser Gly Gly Ile Gly Ala Ala Val Ala Arg Ala
 20 25 30

Leu Val Gln Gln Gly Leu Lys Val Val Gly Cys Ala Arg Thr Val
 35 40 45
 Gly Asn Ile Glu Glu Leu Ala Ala Glu Cys Lys Ser Ala Gly Tyr
 50 55 60

Pro Gly Thr Leu Ile Pro Tyr Arg Cys Asp Leu Ser Asn Glu Glu
 65 70 75

Asp Ile Leu Ser Met Phe Ser Ala Ile Arg Ser Gln His Ser Gly
 80 85 90

Val Asp Ile Cys Ile Asn Asn Ala Gly Leu Ala Arg Pro Asp Thr

Sequence Listing - P3230R1C1.txt

95 100 105
 Leu Leu Ser Gly Ser Thr Ser Gly Trp Lys Asp Met Phe Asn Val
 110 115 120
 Asn Val Leu Ala Leu Ser Ile Cys Thr Arg Glu Ala Tyr Gln Ser
 125 130 135
 Met Lys Glu Arg Asn Val Asp Asp Gly His Ile Ile Asn Ile Asn
 140 145 150
 Ser Met Ser Gly His Arg Val Leu Pro Leu Ser Val Thr His Phe
 155 160 165
 Tyr Ser Ala Thr Lys Tyr Ala Val Thr Ala Leu Thr Glu Gly Leu
 170 175 180
 Arg Gln Glu Leu Arg Glu Ala Gln Thr His Ile Arg Ala Thr Cys
 185 190 195
 Ile Ser Pro Gly Val Val Glu Thr Gln Phe Ala Phe Lys Leu His
 200 205 210
 Asp Lys Asp Pro Glu Lys Ala Ala Ala Thr Tyr Glu Gln Met Lys
 215 220 225
 Cys Leu Lys Pro Glu Asp Val Ala Glu Ala Val Ile Tyr Val Leu
 230 235 240
 Ser Thr Pro Ala His Ile Gln Ile Gly Asp Ile Gln Met Arg Pro
 245 250 255
 Thr Glu Gln Val Thr
 260

<210> 129

<211> 1177

<212> DNA

<213> Homo Sapien

<400> 129

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ttttctgcca ggaaggaaat gtaggtcgt tctgtgctg cgtgttcat 300

ttcagtagcc accagccacc tgtggccgtt gagtgttga aatgaggaac 350

tgagaaaatt aatttctcat gtattttct catttattta ttaattttta 400

Sequence Listing - P3230R1C1.txt

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tctgttcca tccatgttgc tgcaaatgac aggatttcgt tcttaatttc 1150
aattaaaata accacacatg gcaaaaa 1177

<210> 130

<211> 111

<212> PRT

<213> Homo Sapien

<400> 130

Met Gly Leu Leu Leu Val Leu Phe Leu Ser Leu Leu Pro Val
1 5 10 15

Ala Tyr Thr Ile Met Ser Leu Pro Pro Ser Phe Asp Cys Gly Pro
20 25 30

Phe Arg Cys Arg Val Ser Val Ala Arg Glu His Leu Pro Ser Arg
35 40 45

Gly Ser Leu Leu Arg Gly Pro Arg Pro Arg Ile Pro Val Leu Val
50 55 60

Ser Cys Gln Pro Val Lys Gly His Gly Thr Leu Gly Glu Ser Pro
65 70 75

Met Pro Phe Lys Arg Val Phe Cys Gln Asp Gly Asn Val Arg Ser

Sequence Listing - P3230R1C1.txt

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      80      85      90
Phe Cys Val Cys Ala Val His Phe Ser Ser His Gln Pro Pro Val
      95      100      105

Ala Val Glu Cys Leu Lys
      110

<210> 131
<211> 2061
<212> DNA
<213> Homo Sapien

<400> 131
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gttccttcaa gtagcacctc tatcagttat ggctaaatcc tgtccatctg 150
tgtgtcgctg cgatgcgggt ttcatttact gtaatgatcg cttctgaca 200
tccttccaa caggaatacc agaggatgct acaactctct accttcagaa 250
caaccaata aataatgctg ggattccttc agatttgaaa aacttgctga 300
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aacctcccaa agtatgtaaa agagtacat ttgcaagaaa ataacataag 400
gactatcact tatgattcac ttcaaaaat tccttatctg gaagaattac 450
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cgagacagca actatctccg actgcttttc ctgtcccgta atcaccttag 550
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ttcttatcta aggcagctct atcgactgga tatgtccaat aataacctaa 900
gtaatttacc tcagggtatc ttgatgatt tggacaatat aacacaactg 950
attcttcgca acaatccctg gtattgcggg tgcaaatga aatgggtacg 1000
tgactgttta caatcactac ctgtgaaggt caacgtgcgt gggctcatgt 1050

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Sequence Listing - P3230R1C1.txt

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 gaactgtttg attgtaagga cagtgggatt gtaagcacca ttcagataac 1150
 cactgcaata cccaacacag tgtatctgc ccaaggacag tggccagctc 1200
 cagtgcacaa acagccagat attaagaacc ccaagctcac taaggatcaa 1250
 caaaccacag ggagtccttc aagaaaaaca attacaatta ctgtgaagtc 1300
 tgtcacctct gataccattc atatctcttg gaaacttget ctacstatga 1350
 ctgctttgag actcagctgg cttaaaactgg gccatagccc ggcatttggg 1400
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 agccctggag cctgattcac cctataaagt atgcatgggt cccatggaaa 1500
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 agggaggaga agaaaggatg actatgcaga agctggcact aagaaggaca 1800
 actctatcct ggaaatcagg gaaacttctt ttcagatgtt accaataagc 1850
 aatgaacca tctgaagga ggagtttga atacacacca tatttctccc 1900
 taatggaatg aatctgtaca aaaacaatca cagtgaagc agtagtaacc 1950
 gaagctacag agacagtgtg attccagact cagatcactc acactcatga 2000
 tgtgaagga ctcacagcag acttgtgttt tgggtttttt aaacctaaag 2050
 gaggtgatgg t 2061

<210> 132

<211> 649

<212> PRT

<213> Homo Sapien

<400> 132

Met Ile Ser Ala Ala Trp Ser Ile Phe Leu Ile Gly Thr Lys Ile

1 5 10 15

Gly Leu Phe Leu Gln Val Ala Pro Leu Ser Val Met Ala Lys Ser

20 25 30

Sequence Listing - P3230R1C1.txt

Cys Pro Ser Val Cys Arg Cys Asp Ala Gly Phe Ile Tyr Cys Asn
35 40 45

Asp Arg Phe Leu Thr Ser Ile Pro Thr Gly Ile Pro Glu Asp Ala
50 55 60

Thr Thr Leu Tyr Leu Gln Asn Asn Gln Ile Asn Asn Ala Gly Ile
65 70 75

Pro Ser Asp Leu Lys Asn Leu Leu Lys Val Glu Arg Ile Tyr Leu
80 85 90

Tyr His Asn Ser Leu Asp Glu Phe Pro Thr Asn Leu Pro Lys Tyr
95 100 105

Val Lys Glu Leu His Leu Gln Glu Asn Asn Ile Arg Thr Ile Thr
110 115 120

Tyr Asp Ser Leu Ser Lys Ile Pro Tyr Leu Glu Glu Leu His Leu
125 130 135

Asp Asp Asn Ser Val Ser Ala Val Ser Ile Glu Glu Gly Ala Phe
140 145 150

Arg Asp Ser Asn Tyr Leu Arg Leu Leu Phe Leu Ser Arg Asn His
155 160 165

Leu Ser Thr Ile Pro Trp Gly Leu Pro Arg Thr Ile Glu Glu Leu
170 175 180

Arg Leu Asp Asp Asn Arg Ile Ser Thr Ile Ser Ser Pro Ser Leu
185 190 195

Gln Gly Leu Thr Ser Leu Lys Arg Leu Val Leu Asp Gly Asn Leu
200 205 210

Leu Asn Asn His Gly Leu Gly Asp Lys Val Phe Phe Asn Leu Val
215 220 225

Asn Leu Thr Glu Leu Ser Leu Val Arg Asn Ser Leu Thr Ala Ala
230 235 240

Pro Val Asn Leu Pro Gly Thr Asn Leu Arg Lys Leu Tyr Leu Gln
245 250 255

Asp Asn His Ile Asn Arg Val Pro Pro Asn Ala Phe Ser Tyr Leu
260 265 270

Arg Gln Leu Tyr Arg Leu Asp Met Ser Asn Asn Asn Leu Ser Asn
275 280 285

Leu Pro Gln Gly Ile Phe Asp Asp Leu Asp Asn Ile Thr Gln Leu
290 295 300

Ile Leu Arg Asn Asn Pro Trp Tyr Cys Gly Cys Lys Met Lys Trp

Sequence Listing - P3230R1C1.txt

305	310	315
Val Arg Asp Trp Leu Gln Ser Leu Pro Val Lys Val Asn Val Arg		
320	325	330
Gly Leu Met Cys Gln Ala Pro Glu Lys Val Arg Gly Met Ala Ile		
335	340	345
Lys Asp Leu Asn Ala Glu Leu Phe Asp Cys Lys Asp Ser Gly Ile		
350	355	360
Val Ser Thr Ile Gln Ile Thr Thr Ala Ile Pro Asn Thr Val Tyr		
365	370	375
Pro Ala Gln Gly Gln Trp Pro Ala Pro Val Thr Lys Gln Pro Asp		
380	385	390
Ile Lys Asn Pro Lys Leu Thr Lys Asp Gln Gln Thr Thr Gly Ser		
395	400	405
Pro Ser Arg Lys Thr Ile Thr Ile Thr Val Lys Ser Val Thr Ser		
410	415	420
Asp Thr Ile His Ile Ser Trp Lys Leu Ala Leu Pro Met Thr Ala		
425	430	435
Leu Arg Leu Ser Trp Leu Lys Leu Gly His Ser Pro Ala Phe Gly		
440	445	450
Ser Ile Thr Glu Thr Ile Val Thr Gly Glu Arg Ser Glu Tyr Leu		
455	460	465
Val Thr Ala Leu Glu Pro Asp Ser Pro Tyr Lys Val Cys Met Val		
470	475	480
Pro Met Glu Thr Ser Asn Leu Tyr Leu Phe Asp Glu Thr Pro Val		
485	490	495
Cys Ile Glu Thr Glu Thr Ala Pro Leu Arg Met Tyr Asn Pro Thr		
500	505	510
Thr Thr Leu Asn Arg Glu Gln Glu Lys Glu Pro Tyr Lys Asn Pro		
515	520	525
Asn Leu Pro Leu Ala Ala Ile Ile Gly Gly Ala Val Ala Leu Val		
530	535	540
Thr Ile Ala Leu Leu Ala Leu Val Cys Trp Tyr Val His Arg Asn		
545	550	555
Gly Ser Leu Phe Ser Arg Asn Cys Ala Tyr Ser Lys Gly Arg Arg		
560	565	570
Arg Lys Asp Asp Tyr Ala Glu Ala Gly Thr Lys Lys Asp Asn Ser		
575	580	585

Sequence Listing - P3230R1C1.txt

Ile Leu Glu Ile Arg Glu Thr Ser Phe Gln Met Leu Pro Ile Ser
590 595 600

Asn Glu Pro Ile Ser Lys Glu Glu Phe Val Ile His Thr Ile Phe
605 610 615

Pro Pro Asn Gly Met Asn Leu Tyr Lys Asn Asn His Ser Glu Ser
620 625 630

Ser Ser Asn Arg Ser Tyr Arg Asp Ser Gly Ile Pro Asp Ser Asp
635 640 645

His Ser His Ser

<210> 133

<211> 1882

<212> DNA

<213> Homo Sapien

<400> 133

ccgtcatccc cctgcagcca cccctcccag agtcctttgc ccaggccacc 50
ccaggcttct tggcagccct gccggggccac ttgtttcat gtctgccagg 100
gggagggtggg aaggagggtg gaggagggtg tgagaggga gtctgggctt 150
ggccagagct caggggtgct agcgtgtgac cagcagtga cagaggccgg 200
ccatggccag cctggggctg ctgctctctg tcttactgac agcactgcca 250
ccgctgtggt cctctctact gctggggctg gacactgctg aaagtaaagc 300
caccattgca gacctgatcc tgtctgcgt ggagagagcc accgtcttcc 350
tagaacagag gctgcctgaa atcaacctgg atggcatggt ggggggtccga 400
gtgtctggaag agcagctaaa aagtgtccgg gagaagtggg cccaggagcc 450
cctgtctcag ccgtgagcc tgcgcgtggg gatgtctggg gagaagctgg 500
agggtgccat ccagagatcc ctccactacc tcaagctgag tgatcccaag 550
tacctaagag agttccagct gaccctccag cccgggtttt ggaagctccc 600
acatgctctg atccacactg atgctctct ggtgtacccc acgttcgggc 650
cccaggactc attctcagag gagagaagtg acgtgtgctt ggtgcagctg 700
ctgggaaccg ggacggacag cagcgagccc tgcggcctct cagacctctg 750
caggagctct atgaccaagc ccggctgctc aggtactgct ctgtcccacc 800
aactgtcttt ctctctctgg gccagaatga ggggatgcac acagggacca 850

Sequence Listing - P3230R1C1.txt

ctccaacaga gccaggacta tatcaacctc ttctgcgcca acatgatgga 900
cttgaccgc agagctgagg ccateggata cgctaccct acccgggaca 950
ttctcatgga aaacatcatg ttctgtggaa tgggcggctt ctccgacttc 1000
tacaagctcc ggtggctgga ggccattctc agctggcaga aacagcagga 1050
aggatgcttc ggggagcctg atgctgaaga tgaagaatta tctaaagcta 1100
ttcaatatca gcagcathtt tcgaggagag tgaagaggcg agaaaaacaa 1150
ttccagatt ctgctctgt tgctcaggct ggagtacagt ggcgcaatct 1200
cggtcactg caacctttgc ctctgggtt caagcaattc tctgcctca 1250
tcctcccgag tagctgggac tacaggagcg tgccaccata cctggcta 1300
ttttatat tttagtaga gacagggtt catcatgtt ctcatgttg 1350
tctgaactc ctgatctca gagatccgc cactcaggc tcccaaagt 1400
tgggattata ggtgtgagcc accgtgtctg gctgaaaagc actttcaaag 1450
agactgtgtt gaataaaggg ccaaggttct tgccaccag cactcatggg 1500
ggctctctcc ctagatggc tgctctccc acaacacagc cacagcagt 1550
gcagccctgg gtggcttct atacatctg gcagaatacc cccagcaaa 1600
cagagagcca caccatcca caccgccacc accaagcagc cgctgagagc 1650
gacggttcca tgccagctgc ctggaggagg aacagacccc tttagtcctc 1700
atcccttaga tctggagggg caggatcac atcctgggaa gaaggcatct 1750
ggaggataag caaagccacc ccgacacca atcttgaag cctgagtag 1800
gcagggccag gtaggtggg ggccgggagg gaccagggtg tgaaccgatg 1850
aataaagttc aactgcaact gaaaaaaaaa aa 1882

<210> 134

<211> 440

<212> PRT

<213> Homo Sapien

<400> 134

Met Ser Ala Arg Gly Arg Trp Glu Gly Gly Arg Arg Ala Cys

1 5 10 15

Arg Gly Ser Leu Gly Leu Ala Arg Ala Gln Gly Ala Glu Arg Val

20 25 30

Thr Ser Ser Glu Gln Arg Pro Ala Met Ala Ser Leu Gly Leu Leu

35 40 45

Sequence Listing - P3230R1C1.txt

Leu Leu Leu Leu Thr Ala Leu Pro Pro Leu Trp Ser Ser Ser
 50 55 60
 Leu Pro Gly Leu Asp Thr Ala Glu Ser Lys Ala Thr Ile Ala Asp
 65 70 75
 Leu Ile Leu Ser Ala Leu Glu Arg Ala Thr Val Phe Leu Glu Gln
 80 85 90
 Arg Leu Pro Glu Ile Asn Leu Asp Gly Met Val Gly Val Arg Val
 95 100 105
 Leu Glu Glu Gln Leu Lys Ser Val Arg Glu Lys Trp Ala Gln Glu
 110 115 120
 Pro Leu Leu Gln Pro Leu Ser Leu Arg Val Gly Met Leu Gly Glu
 125 130 135
 Lys Leu Glu Ala Ala Ile Gln Arg Ser Leu His Tyr Leu Lys Leu
 140 145 150
 Ser Asp Pro Lys Tyr Leu Arg Glu Phe Gln Leu Thr Leu Gln Pro
 155 160 165
 Gly Phe Trp Lys Leu Pro His Ala Trp Ile His Thr Asp Ala Ser
 170 175 180
 Leu Val Tyr Pro Thr Phe Gly Pro Gln Asp Ser Phe Ser Glu Glu
 185 190 195
 Arg Ser Asp Val Cys Leu Val Gln Leu Leu Gly Thr Gly Thr Asp
 200 205 210
 Ser Ser Glu Pro Cys Gly Leu Ser Asp Leu Cys Arg Ser Leu Met
 215 220 225
 Thr Lys Pro Gly Cys Ser Gly Tyr Cys Leu Ser His Gln Leu Leu
 230 235 240
 Phe Phe Leu Trp Ala Arg Met Arg Gly Cys Thr Gln Gly Pro Leu
 245 250 255
 Gln Gln Ser Gln Asp Tyr Ile Asn Leu Phe Cys Ala Asn Met Met
 260 265 270
 Asp Leu Asn Arg Arg Ala Glu Ala Ile Gly Tyr Ala Tyr Pro Thr
 275 280 285
 Arg Asp Ile Phe Met Glu Asn Ile Met Phe Cys Gly Met Gly Gly
 290 295 300
 Phe Ser Asp Phe Tyr Lys Leu Arg Trp Leu Glu Ala Ile Leu Ser
 305 310 315
 Trp Gln Lys Gln Gln Glu Gly Cys Phe Gly Glu Pro Asp Ala Glu

Sequence Listing - P3230R1C1.txt

```

320          325          330
Asp Glu Leu Ser Lys Ala Ile Gln Tyr Gln Gln His Phe Ser
335          340          345
Arg Arg Val Lys Arg Arg Glu Lys Gln Phe Pro Asp Ser Arg Ser
350          355          360
Val Ala Gln Ala Gly Val Gln Trp Arg Asn Leu Gly Ser Leu Gln
365          370          375
Pro Leu Pro Pro Gly Phe Lys Gln Phe Ser Cys Leu Ile Leu Pro
380          385          390
Ser Ser Trp Asp Tyr Arg Ser Val Pro Pro Tyr Leu Ala Asn Phe
395          400          405
Tyr Ile Phe Leu Val Glu Thr Gly Phe His His Val Ala His Ala
410          415          420
Gly Leu Glu Leu Leu Ile Ser Arg Asp Pro Pro Thr Ser Gly Ser
425          430          435
Gln Ser Val Gly Leu
440

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<210> 135

<211> 884

<212> DNA

<213> Homo Sapien

<400> 135

ggcttgagtg cagagctgct gtcattggcg ccgctctgtg gggcttctt 50

cccgtctgc tgctgctgct gctatcgggg gatgtccaga gctcggaggt 100
gccccgggct gctgctgagg gatcgggagg gaggggggc ggcataggag 150

atcgcttcaa gattgagggg cgtgcagttg ttccaggggt gaagcctcag 200

gactggatct cggcgggccc agtgctggtg gacggagaag agcacgtcgg 250

tttccttaag acagatggga gttttgtggt tcattatata cttctggat 300

cttatgtagt ggaagttgta tctccagctt acagatttga tccggttcga 350

gtggatatca cttcgaagg aaaaatgaga gcaagatatg tgaattacat 400

caaaacatca gaggttgta gactgcccta tccttccaa atgaaatctt 450

cagggtccacc ttcttacttt attaaaagg aatcgtgggg ctggacagac 500

tttctaata acccaatggt tatgatgatg gttcttctt tattgatatt 550

tgtgtctctg cctaaagtgg tcaacacaag tgatcctgac atgagacggg 600

Sequence Listing - P3230R1C1.txt

aaatggagca gtcaatgaat atgctgaatt ccaaccatga gttgcctgat 650
 gtttctgagt tcatgacaag actcttctct tcaaaatcat ctggcaaatc 700
 tagcagcgcc agcagtaaaa caggcaaaaag tggggctggc aaaaggaggt 750
 agtcaggccg tccagagctg gcatttgac aaacacggca acactgggtg 800
 gcatccaagt cttggaaaac cgtgtgaagc aactactata aacttgagtc 850
 atcccagcgt tgatctctta caactgtgta tggt 884

<210> 136

<211> 242

<212> PRT

<213> Homo Sapien

<400> 136

Met Ala Ala Leu Trp Gly Phe Phe Pro Val Leu Leu Leu Leu
 1 5 10 15

Leu Leu Ser Gly Asp Val Gln Ser Ser Glu Val Pro Gly Ala Ala
 20 25 30

Ala Glu Gly Ser Gly Gly Ser Gly Val Gly Ile Gly Asp Arg Phe
 35 40 45

Lys Ile Gly Ser Arg Ala Val Val Pro Gly Val Lys Pro Gln Asp
 50 55 60

Trp Ile Ser Ala Ala Arg Val Leu Val Asp Gly Glu His Val
 65 70 75

Gly Phe Leu Lys Thr Asp Gly Ser Phe Val Val His Asp Ile Pro
 80 85 90

Ser Gly Ser Tyr Val Val Glu Val Val Ser Pro Ala Tyr Arg Phe
 95 100 105

Asp Pro Val Arg Val Asp Ile Thr Ser Lys Gly Lys Met Arg Ala
 110 115 120

Arg Tyr Val Asn Tyr Ile Lys Thr Ser Glu Val Val Arg Leu Pro
 125 130 135

Tyr Pro Leu Gln Met Lys Ser Ser Gly Pro Pro Ser Tyr Phe Ile
 140 145 150

Lys Arg Glu Ser Trp Gly Trp Thr Asp Phe Leu Met Asn Pro Met
 155 160 165

Val Met Met Met Val Leu Pro Leu Leu Ile Phe Val Leu Leu Pro
 170 175 180

Lys Val Val Asn Thr Ser Asp Pro Asp Met Arg Arg Glu Met Glu

Sequence Listing - P3230R1C1.txt

185	190	195
Gln Ser Met Asn Met Leu Asn Ser Asn His Glu Leu Pro Asp Val		
200	205	210
Ser Glu Phe Met Thr Arg Leu Phe Ser Ser Lys Ser Ser Gly Lys		
215	220	225
Ser Ser Ser Gly Ser Ser Lys Thr Gly Lys Ser Gly Ala Gly Lys		
230	235	240

Arg Arg

<210> 137

<211> 1571

<212> DNA

<213> Homo Sapien

<400> 137

gatggcgag ccacagcttc tgtgagattc gatttctccc cagttcccct 50

gtgggtctga ggggaccaga aggggtgagct acgttggtt tctggaagg 100

gaggctatat gcgtcaattc cccaaacaa gttttgacat ttcccctgaa 150

atgtcattct ctatctattc actgcaagt cctgctgttc caggccttac 200

ctgctgggca ctaacggcgg agccaggatg gggacagaat aaaggagcca 250

cgacctgtgc caccaactcg cactcagact ctgaactcag acctgaaatc 300

ttctcttcac gggaggcttg gcagtttttc ttactcctgt ggtctccaga 350

tttcaggcct aagatgaaag cctctagtct tgccttcagc cttctctctg 400

ctgcgtttta tctcctatgg actccttcca ctggactgaa gacactcaat 450

ttgggaagct gtgtgatcgc cacaacctt caggaaatac gaaatggatt 500

ttctgagata cggggcagtg tgcaagccaa agatggaac attgacatca 550

gaattctaag gaggactgag tctttgcaag acacaaagcc tgcaaatcga 600

tgtgctctcc tgcgccattt gctaagactc tatctggaca gggattttaa 650

aaactaccag acccctgacc attatactct ccggaagatc agcagcctcg 700

ccaattcctt tcttaccatc aagaaggacc tccggctctc tcatgcccac 750

atgacatgcc attgtgggga ggaagcaatg aagaataca gccagattct 800

gagtcacttt gaaaagctgg aacctcaggc agcagttgtg aaggctttgg 850

gggaactaga cattcttctg caatggatgg aggagacaga ataggaggaa 900

Sequence Listing - P3230R1C1.txt

agtgatgctg ctgctaagaa tattcgaggt caagagctcc agtcttcaat 950
 acctgcagag gaggcagatgac cccaaaccac catctcttta ctgtactagt 1000
 cttgtgctgg tcacagtgtg tcttatttat gcattacttg cttccttgca 1050
 tgaattgctt tatgcatccc caatcttaat tgagaccata cttgtataag 1100
 atttttgtaa tatctttctg ctattggata tatttattag ttaatatatt 1150
 tatttatttt ttgctattta atgtatttat tttttactt ggacatgaaa 1200
 ctttaaaaaa attcacagat tatatttata acctgactag agcagggtgat 1250
 gtatttttat acagtaaaaa aaaaaaacct tgtaattct agaagagtgg 1300
 ctgggggggt tattcatttg tattcaacta aggacatatt tactcatgct 1350
 gatgctctgt gagatatttg aaattgaacc aatgactact taggatgggt 1400
 tgtggaataa gttttgatgt ggaattgcac atctacctta caattactga 1450
 ccatcccccag tagactcccc agtcccataa ttgtgtatct tccagccagg 1500
 aatcctacac ggcagcatg tatttctaca aataaagtgt tctttgcata 1550
 ccaaaaaaaaa aaaaaaaaaa a 1571

<210> 138

<211> 261

<212> PRT

<213> Homo Sapien

<400> 138

Met Arg Gln Phe Pro Lys Thr Ser Phe Asp Ile Ser Pro Glu Met

1 5 10 15

Ser Phe Ser Ile Tyr Ser Leu Gln Val Pro Ala Val Pro Gly Leu

20 25 30

Thr Cys Trp Ala Leu Thr Ala Glu Pro Gly Trp Gly Gln Asn Lys

35 40 45

Gly Ala Thr Thr Cys Ala Thr Asn Ser His Ser Asp Ser Glu Leu

50 55 60

Arg Pro Glu Ile Phe Ser Ser Arg Glu Ala Trp Gln Phe Phe Leu

65 70 75

Leu Leu Trp Ser Pro Asp Phe Arg Pro Lys Met Lys Ala Ser Ser

80 85 90

Leu Ala Phe Ser Leu Leu Ser Ala Ala Phe Tyr Leu Leu Trp Thr

95 100 105

Sequence Listing - P3230R1C1.txt

Pro Ser Thr Gly Leu Lys Thr Leu Asn Leu Gly Ser Cys Val Ile
 110 115 120

Ala Thr Asn Leu Gln Glu Ile Arg Asn Gly Phe Ser Glu Ile Arg
 125 130 135

Gly Ser Val Gln Ala Lys Asp Gly Asn Ile Asp Ile Arg Ile Leu
 140 145 150

Arg Arg Thr Glu Ser Leu Gln Asp Thr Lys Pro Ala Asn Arg Cys
 155 160 165

Cys Leu Leu Arg His Leu Leu Arg Leu Tyr Leu Asp Arg Val Phe
 170 175 180

Lys Asn Tyr Gln Thr Pro Asp His Tyr Thr Leu Arg Lys Ile Ser
 185 190 195

Ser Leu Ala Asn Ser Phe Leu Thr Ile Lys Lys Asp Leu Arg Leu
 200 205 210

Ser His Ala His Met Thr Cys His Cys Gly Glu Glu Ala Met Lys
 215 220 225

Lys Tyr Ser Gln Ile Leu Ser His Phe Glu Lys Leu Glu Pro Gln
 230 235 240

Ala Ala Val Val Lys Ala Leu Gly Glu Leu Asp Ile Leu Leu Gln
 245 250 255

Trp Met Glu Glu Thr Glu
 260

<210> 139

<211> 2395

<212> DNA

<213> Homo Sapien

<400> 139

cctggagccg gaagcgcggc tgcagcaggg cgaggctcca ggtggggctg 50

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tcgctacctg ttgcgtagcg atcgagggtc tagggatcgc ggtcttcctt 150

cggggattct tcccggctcc cggttcgttc tctgccagag cggaacacgg 200

agcgggagccc ccagcgcgcc aacctctggc tggagccagt tctaactgga 250

ccacgctgcc accacctctc ttacgtaaa ttgtattgt tctgatagat 300

gccttgagag atgattttgt gtttgggtca aagggtgtga aatttatgcc 350

ctacacaact taccttgttg aaaaaggagc atctcacagt ttgtggctg 400

Sequence Listing - P3230R1C1.txt

aagcaaagcc acctacagtt actatgcctc gaatcaaggc attgatgacg 450
 gggagccttc ctggctttgt cgacgtcatc aggaacctca attctcctgc 500
 actgctggaa gacagtgtga taagacaagc aaaagcagct ggaanaagaa 550
 tagcttttta tggagatgaa acctgggtta aattattccc aaagcatttt 600
 gtggaatatg atggaacaac ctcatttttc gtgtcagatt acacagaggt 650
 ggataataat gtcacgaggc atttgataa agtattaaaa agaggagatt 700
 gggacatatt aatcctccac tacctggggc tggaccacat tggccacatt 750
 tcaggggcca acagccccct gattgggcag aagctgagcg agatggacag 800
 ctgtctgatg aagatccaca ctcactgca gtcgaaggag agagagacgc 850
 ctttaccxaa ttgtctggtt ctttgggtg accatggcat gtctgaaaca 900
 ggaagtccag gggcctcctc caccgaggag gtgaatacac ctctgatttt 950
 aatcagttct gcgtttgaaa ggaacccgg tgatatccga catccaaagc 1000
 acgtccaata gacggatgtg gctgcgacac tggcgatagc acttgctta 1050
 ccgattccaa aagacagtgt agggagcctc ctattccag ttgtggaagg 1100
 aagaccaatg agagagcagt tgagattttt acatttgaat acagtgcagc 1150
 ttagtaaact gttgaagag aatgtgccg catatgaaaa agatcctggg 1200
 ttgagcagt taaaatgtc agaaagattg catgggaact ggcacagact 1250
 gtactggag gaaaagcatt cagaagtcct attcaacctg ggcaccaagg 1300
 ttctcaggca gtacctggat gctctgaaga cgctgagctt gtcctgagt 1350
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 ctgcacagaa aggctgagct ggaagtccca ctgtcatctc ctgggttttc 1450
 tctgctttt tatttggta tctggttct ttcggccgtt cagctcattg 1500
 tgtgcacctc agctgaaagt tegtgtact tctgtgccct ctctgtggtg 1550
 gcggcaggct gcctttcgtt taccagactc tgggtgaaca cctggtgtgt 1600
 gccaaagtgt ggcagtgcct tggacagggg gcctcagggg aggcagtgtg 1650
 gcagccttat ccaggcctc tgggtgtccc gacacaggtg ttcacatctg 1700
 tgctgtcagg tcagatgctt cagttcttgg aaagctaggt tctgcgact 1750
 gttaccaagg tgattgtaaa gagctggcgg tcacagagga acaagcccc 1800

Sequence Listing - P3230R1C1.txt

cagctgaggg ggtgtgtgaa tcggacagcc tccagcaga ggtgtgggag 1850
ctgcagctga ggggaagaaga gacaatcggc ctggacactc aggaggggtca 1900
aaaggagact tggctgcacc actcatcctg ccaccccccag aatgcatcct 1950
gcctcatcag gtccagattt ctttccaagg cggacgtttt ctgttggaat 2000
tcttagtctt tggcctcgga caccttcatt cgtagctgg ggagtgggtgg 2050
tgaggcagtg aagaagaggc ggatgggtcac actcagatcc acagagccca 2100
ggatcaaggg acccactgca gtggcagcag gactgttggg ccccccccc 2150
aaccttcgac agccctcatc cctcttggc ttgagccgtc agaggccctg 2200
tgctgagtgt ctgaccgaga cactcacagc ttgtcatca gggcacaggc 2250
ttctcggag ccaggatgat ctgtgccacg cttgcacctc gggcccatct 2300
gggtcatgc tctctctct gctattgaat tagtacctag ctgcacacag 2350
tatgtagtta ccaaagaat aaacggcaat aattgagaaa aaaaa 2395

<210> 140

<211> 310

<212> PRT

<213> Homo Sapien

<400> 140

Met Arg Leu Gly Ser Gly Thr Phe Ala Thr Cys Cys Val Ala Ile

1 5 10 15

Glu Val Leu Gly Ile Ala Val Phe Leu Arg Gly Phe Phe Pro Ala

20 25 30

Pro Val Arg Ser Ser Ala Arg Ala Glu His Gly Ala Glu Pro Pro

35 40 45

Ala Pro Glu Pro Ser Ala Gly Ala Ser Ser Asn Trp Thr Thr Leu

50 55 60

Pro Pro Pro Leu Phe Ser Lys Val Val Ile Val Leu Ile Asp Ala

65 70 75

Leu Arg Asp Asp Phe Val Phe Gly Ser Lys Gly Val Lys Phe Met

80 85 90

Pro Tyr Thr Thr Tyr Leu Val Glu Lys Gly Ala Ser His Ser Phe

95 100 105

Val Ala Glu Ala Lys Pro Pro Thr Val Thr Met Pro Arg Ile Lys

110 115 120

Sequence Listing - P3230R1C1.txt

Ala Leu Met Thr Gly Ser Leu Pro Gly Phe Val Asp Val Ile Arg
125 130 135

Asn Leu Asn Ser Pro Ala Leu Leu Glu Asp Ser Val Ile Arg Gln
140 145 150

Ala Lys Ala Ala Gly Lys Arg Ile Val Phe Tyr Gly Asp Glu Thr
155 160 165

Trp Val Lys Leu Phe Pro Lys His Phe Val Glu Tyr Asp Gly Thr
170 175 180

Thr Ser Phe Phe Val Ser Asp Tyr Thr Glu Val Asp Asn Asn Val
185 190 195

Thr Arg His Leu Asp Lys Val Leu Lys Arg Gly Asp Trp Asp Ile
200 205 210

Leu Ile Leu His Tyr Leu Gly Leu Asp His Ile Gly His Ile Ser
215 220 225

Gly Pro Asn Ser Pro Leu Ile Gly Gln Lys Leu Ser Glu Met Asp
230 235 240

Ser Val Leu Met Lys Ile His Thr Ser Leu Gln Ser Lys Glu Arg
245 250 255

Glu Thr Pro Leu Pro Asn Leu Leu Val Leu Cys Gly Asp His Gly
260 265 270

Met Ser Glu Thr Gly Ser His Gly Ala Ser Ser Thr Glu Glu Val
275 280 285

Asn Thr Pro Leu Ile Leu Ile Ser Ser Ala Phe Glu Arg Lys Pro
290 295 300

Gly Asp Ile Arg His Pro Lys His Val Gln
305 310

<210> 141

<211> 754

<212> DNA

<213> Homo Sapien

<400> 141

ggcagcaggc aagcctcca ggtatcgtg acgcaccttg aaagtctgag 50
agctactgcc ctacagaaag ttactagtgc cctaaagctg gcgctggcac 100
tgatgttact gctgctgttg gagtacaact tccctataga aaacaactgc 150
cagcacctta agaccactca caccttcaga gtgaagaact taaaccggaa 200
gaaattcagc attcatgacc aggatcacia agtactgggc ctggactctg 250

Sequence Listing - P3230R1C1.txt

ggaatctcat agcagttcca gataaaaact acatacggcc agagatcttc 300
 ttgcattag cctcatcctt gagctcagcc tctcgggaga aaggaagtcc 350
 gattctcctg ggggtctcta aaggggagtt ttgtctctac tgtgacaagg 400
 ataaaggaca aagtcattcca tcccttcagc tgaagaagga gaaactgatg 450
 aagctggctg cccaaaagga atcagcagcg cggtccctta tcttttatag 500
 ggctcaggtg ggctcctgga acatgctgga gtcggcggt caccctggat 550
 ggctcatctg cactcctgc aattgtaatg agcctgttgg ggtgacagat 600
 aaattgaga acaggaaaca cattgaattt tcatttcaac cagtttgcaa 650
 agctgaaatg agccccagtg aggtcagcga ttaggaaact gccccattga 700
 agccttctct cgctaatttg aactaattgt ataaaaacac caaacctgct 750

cact 754

<210> 142

<211> 193

<212> PRT

<213> Homo Sapien

<400> 142

Met Leu Leu Leu Leu Glu Tyr Asn Phe Pro Ile Glu Asn Asn
 1 5 10 15

Cys Gln His Leu Lys Thr Thr His Thr Phe Arg Val Lys Asn Leu
 20 25 30

Asn Pro Lys Lys Phe Ser Ile His Asp Gln Asp His Lys Val Leu
 35 40 45

Val Leu Asp Ser Gly Asn Leu Ile Ala Val Pro Asp Lys Asn Tyr
 50 55 60

Ile Arg Pro Glu Ile Phe Phe Ala Leu Ala Ser Ser Leu Ser Ser
 65 70 75

Ala Ser Ala Glu Lys Gly Ser Pro Ile Leu Leu Gly Val Ser Lys
 80 85 90

Gly Glu Phe Cys Leu Tyr Cys Asp Lys Asp Lys Gly Gln Ser His
 95 100 105

Pro Ser Leu Gln Leu Lys Lys Glu Lys Leu Met Lys Leu Ala Ala
 110 115 120

Gln Lys Glu Ser Ala Arg Arg Pro Phe Ile Phe Tyr Arg Ala Gln
 125 130 135

Val Gly Ser Trp Asn Met Leu Glu Ser Ala Ala His Pro Gly Trp

Sequence Listing - P3230R1C1.txt

140	145	150
Phe Ile Cys Thr Ser Cys Asn Cys Asn Glu Pro Val Gly Val Thr		
155	160	165
Asp Lys Phe Glu Asn Arg Lys His Ile Glu Phe Ser Phe Gln Pro		
170	175	180
Val Cys Lys Ala Glu Met Ser Pro Ser Glu Val Ser Asp		
185	190	

<210> 143

<211> 961

<212> DNA

<213> Homo Sapien

<400> 143

ctagagagta tagggcagaa ggatggcaga tgagtgactc cacatccaga 50

gctgcctccc ttaatccag gatacctgtcc ttcctgtcct gtaggagtg 100

ctgttgccag tgtgggggtga gacaagtttg tccacagggt ctgtctgagc 150

agataagatt aagggtctggg tctgtgtctca attaactcct gtgggcacgg 200

gggtctgggaa gagcaaagtc agcgggtgcct acagtcagca ccatgtctggg 250

cctgccgtgg aagggtgggtc tgcctctgggc gctgtgtctg cttctcttag 300

gctcccagat cctgtctgac tatgcctggc atttcacga gcaaagggtac 350

tgtgatgaac acaatgtcat ggctcgttac ctccctgcca cagtggagtt 400

tgtgtccac acattcaacc aacagagcaa ggactactat gcctacagac 450

tggggcacat ctgaattcc tggaaggagc aggtggagtc caagactgta 500

tttcaatgg agctactgct ggggagaact aggtgtggga aatttgaaga 550

cgacattgac aactgccatt tccaagaaag cacagagctg aacaatactt 600

tcacctgctt cttcaccatc agcaccaggc cctggatgac tcagttcagc 650

ctcctgaaca agacctgctt ggaggggattc cactgagtga aaccactca 700

caggcttgtc catgtgtctg tcccacattc cgtggacatc agcactactc 750

tcctgaggac tcttcagtgg ctgagcagct ttggacttgt ttgttatcct 800

attttgcatg tgtttgagat ctcatatcag tgttttagaa aatccacaca 850

tcttgagcct aatcatgtag tgtagatcat taaacatcag cattttaaga 900

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 950

aaaaaaaaa a 961

Sequence Listing - P3230R1C1.txt

<210> 144

<211> 147

<212> PRT

<213> Homo Sapien

<400> 144

Met Leu Gly Leu Pro Trp Lys Gly Gly Leu Ser Trp Ala Leu Leu
1 5 10 15

Leu Leu Leu Leu Gly Ser Gln Ile Leu Leu Ile Tyr Ala Trp His
20 25 30

Phe His Glu Gln Arg Asp Cys Asp Glu His Asn Val Met Ala Arg
35 40 45

Tyr Leu Pro Ala Thr Val Glu Phe Ala Val His Thr Phe Asn Gln
50 55 60

Gln Ser Lys Asp Tyr Tyr Ala Tyr Arg Leu Gly His Ile Leu Asn
65 70 75

Ser Trp Lys Glu Gln Val Glu Ser Lys Thr Val Phe Ser Met Glu
80 85 90

Leu Leu Leu Gly Arg Thr Arg Cys Gly Lys Phe Glu Asp Asp Ile
95 100 105

Asp Asn Cys His Phe Gln Glu Ser Thr Glu Leu Asn Asn Thr Phe
110 115 120

Thr Cys Phe Phe Thr Ile Ser Thr Arg Pro Trp Met Thr Gln Phe
125 130 135

Ser Leu Leu Asn Lys Thr Cys Leu Glu Gly Phe His
140 145

<210> 145

<211> 1157

<212> DNA

<213> Homo Sapien

<400> 145

ctgtgcagct cgaggctcca gaggcacact ccagagagag ccaaggttct 50

gacgcgatga ggaagcacct gagctgggtg tggtgggcca ctgtctgcac 100

gctgtctctc agccacctct ctgcgggtcca gacgaggggc atcaagcaca 150

gaatcaagtg gaaccggaag gccctgcecca gcactgcecca gatcactgag 200

gcccagggtgg ctgagaaccg cccgggagcc ttcatcaagc aagggccgcaa 250

gctcgacatt gacttcggag ccgaggggcaa cagggtactac gaggccaact 300

Sequence Listing - P3230R1C1.txt

actggcaggt ccccgatggc atccactaca acggctgctc tgaggctaat 350
 gtgaccaagg aggcatttgt caccggctgc atcaatgcca ccaggcggc 400
 gaaccagggg gagttccaga agccagacaa caagctccac cagcaggtgc 450
 tctggcggct ggtccaggag ctctgctccc tcaagcattg cgagttttgg 500
 ttggagaggg gcgcaggact tcgggtcacc atgcaccagc cagtgtctct 550
 ctgcctctg cgtttgatct ggctcatggt gaaataagct tgccaggagg 600
 ctggcagtac agagcgagc agcgagcaaa tcctggcaag tgaccagct 650
 ctctctccc aaaccacgc gtgttctgaa ggtgccagg agcggcgatg 700
 cactcgact gcaaatgccg ctcccacgta tgcgccttg tatgtgctg 750
 cgttctgata gatgggggac tgtggtctt ccgtcactcc atttcagcc 800
 cctagcagag cgtctggcac actagattag tagtaaatgc ttgatgagaa 850
 gaacacatca ggcaactgc cactgtctc acagtactc ccaacaact 900
 ttgaggtag gtgtattccc gttttacaga taaggaaact gagggccaga 950
 gagctgaagt actgcacca gcatcaccag ctgaaagtg gcagagccag 1000
 gattcaaccc tggcttgctt aacccagggt tttctgctt gtccaattcc 1050
 agagctgtct ggtgatcact ttatgtctc cagggacca catccaaca 1100
 tgtatctcta atgaaattgt gaaagctcca tgtttagaaa taaatgaaa 1150
 cacctga 1157

<210> 146

<211> 176

<212> PRT

<213> Homo Sapien

<400> 146

Met Arg Lys His Leu Ser Trp Trp Trp Leu Ala Thr Val Cys Met

1 5 10 15

Leu Leu Phe Ser His Leu Ser Ala Val Gln Thr Arg Gly Ile Lys

20 25 30

His Arg Ile Lys Trp Asn Arg Lys Ala Leu Pro Ser Thr Ala Gln

35 40 45

Ile Thr Glu Ala Gln Val Ala Glu Asn Arg Pro Gly Ala Phe Ile

50 55 60

Lys Gln Gly Arg Lys Leu Asp Ile Asp Phe Gly Ala Glu Gly Asn

Sequence Listing - P3230R1C1.txt

```

        65          70          75
Arg Tyr Tyr Glu Ala Asn Tyr Trp Gln Phe Pro Asp Gly Ile His
  80          85          90
Tyr Asn Gly Cys Ser Glu Ala Asn Val Thr Lys Glu Ala Phe Val
  95          100         105
Thr Gly Cys Ile Asn Ala Thr Gln Ala Ala Asn Gln Gly Glu Phe
  110         115         120
Gln Lys Pro Asp Asn Lys Leu His Gln Gln Val Leu Trp Arg Leu
  125         130         135
Val Gln Glu Leu Cys Ser Leu Lys His Cys Glu Phe Trp Leu Glu
  140         145         150
Arg Gly Ala Gly Leu Arg Val Thr Met His Gln Pro Val Leu Leu
  155         160         165
Cys Leu Leu Ala Leu Ile Trp Leu Met Val Lys
  170         175

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<210> 147
 <211> 333
 <212> DNA
 <213> Homo Sapien

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<400> 147
gccttggcct cccaaagggc tgggattata ggcgtgacca ccatgtctgg 50
tccagagtct catttctga tgatttatag actcaaagaa aactcatgtt 100
cagaagctct ctctcttct ggcctcctct ctgtcttctt tccctctttc 150
ttcttatttt aattagtagc atctactcag agtcatgcaa gctggaaatc 200
tttcattttg ctgtcagtg gggtaggtca ctgagtctta gtttttattt 250
tttgaaattt caactttcag attcaggggg tacatgtgaa ggtttgtttt 300
atgagtatat tgcgatgagc tgaggttttg ggt 333

```

<210> 148
 <211> 73
 <212> PRT
 <213> Homo Sapien

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<400> 148
Met Phe Arg Ser Ser Leu Leu Phe Trp Pro Pro Leu Cys Leu Leu
  1          5          10         15
Ser Leu Phe Leu Leu Ile Leu Ile Ser Ser Ile Tyr Ser Glu Ser
  20         25         30

```

Sequence Listing - P3230R1C1.txt

Cys Lys Leu Glu Ile Phe His Phe Ala Cys Gln Trp Gly Arg Ser
35 40 45

Leu Ser Leu Ser Phe Tyr Phe Leu Lys Phe Gln Leu Ser Asp Ser
50 55 60

Gly Gly Thr Cys Glu Gly Leu Phe Tyr Glu Tyr Ile Ala
65 70

<210> 149

<211> 1893

<212> DNA

<213> Homo Sapien

<400> 149

gtctccgcgt cacaggaact tcagcaccca cagggcggag agcgcgtccc 50
tctacctgga gacttgactc ccgcgcgccc caacctgtct tatcccttga 100
ccgtcgaagt tcagagatcc tgcagccgcc cagtcccgcc ccctctcccg 150
ccccacaccc accctctcgg ctcttctgt tttactcct ccttttcatt 200
cataacaaaa gctacagctc caggagccca gcgcggggtc gtgaccaag 250
ccgagcgtgg aagaatgggg ttccctggga ccggcacttg gattctggtg 300
ttagtgtctc cgattcaagc ttccccaaa cctggaggaa gccaaagcaa 350
atctctacat aatagagaat taagtcaga aagaccttg aatgaacaga 400
ttgtgaagc agaagaagac aagattaaaa aaacatatcc tccagaaaa 450
aagccaggtc agagcaacta ttctttgtt gataactga acctgctaaa 500
ggcaataaca gaaaaggaaa aaattgagaa agaaagacaa tctataagaa 550
gtccccact tgataataag ttgaatgtgg aagatgtga ttcaaccaag 600
aatcgaaaac tgatcgatga ttatgactct actaagagtg gattggatca 650
taatttcaa gatgatccag atggtcttca tcaactagac gggactcct 700
taaccgtga agacattgtc cataaaatcg ctgccaggat ttatgaagaa 750
aatgacagag ccgtgtttga caagattgtt tctaaactac ttaatctcg 800
ccttatcaca gaaagccaag cacatacact ggaagatgaa gtagcagagg 850
ttttacaaaa attaatctca aaggaagcca acaattatga ggaggatccc 900
aataagccca caagctggac tgagaatcag gctggaaaaa taccagagaa 950
agtgactcca atggcagcaa ttcaagatgg tcttgtaag ggagaaaaag 1000
atgaacagct atctaacaca ttaaccttga caaatggctt ggaaaggaga 1050

Sequence Listing - P3230R1C1.txt

actaaaacct acagtgaaga caactttgag gaactccaat atttccaaa 1100
 ttctatgcg ctactgaaaa gtattgattc agaaaaagaa gcaaagaga 1150
 aagaaacct gattactatc atgaaacac tgattgactt tgtgaagatg 1200
 atggtgaaat atggaacaat atctccagaa gaagtggttt cctacctga 1250
 aaacttggat gaaatgattg ctcttcagac caaaaacaag ctagaaaaaa 1300
 atgctactga caatataagc aagcttttcc cagcaccatc agagaagagt 1350
 catgaagaaa cagacagtac caaggaagaa gcagctaaga tggaaaagga 1400
 atatggaagc tgaaggatt ccacaaaaga tgataactcc aaccaggag 1450
 gaaagacaga tgaaccctaa ggaaaaacag aagcctattt ggaagccatc 1500
 agaaaaata tgaatgggtt gaagaaacat gacaaaaagg gaaataaaga 1550
 agattatgac ctttcaaaga tgagagactt catcaataaa caagctgatg 1600
 cttatgtgga gaaaggcatc ctgacaagg aagaagccga ggccatcaag 1650
 cgcatttata gcagcctga aaaatggcaa aagatccagg agtctttcaa 1700
 ctgttcaga aaacataata tagcttaaaa cacttctaatt tctgtgatta 1750
 aaattttttg acccaagggg tattagaaag tgctgaattt acagtagtta 1800
 accttttaca agtgggttaa acatagcttt cttcccgtaa aaactatctg 1850
 aaagtaaagt tgtatgtaag ctgaaaaaaa aaaaaaaaaa aaa 1893

<210> 150

<211> 468

<212> PRT

<213> Homo Sapien

<400> 150

Met Gly Phe Leu Gly Thr Gly Thr Trp Ile Leu Val Leu Val Leu

1 5 10 15

Pro Ile Gln Ala Phe Pro Lys Pro Gly Gly Ser Gln Asp Lys Ser

20 25 30

Leu His Asn Arg Glu Leu Ser Ala Glu Arg Pro Leu Asn Glu Gln

35 40 45

Ile Ala Glu Ala Glu Glu Asp Lys Ile Lys Lys Thr Tyr Pro Pro

50 55 60

Glu Asn Lys Pro Gly Gln Ser Asn Tyr Ser Phe Val Asp Asn Leu

65 70 75

Sequence Listing - P3230R1C1.txt

```

Asn Leu Leu Lys Ala Ile Thr Glu Lys Glu Lys Ile Glu Lys Glu
  80          85          90

Arg Gln Ser Ile Arg Ser Ser Pro Leu Asp Asn Lys Leu Asn Val
  95          100         105

Glu Asp Val Asp Ser Thr Lys Asn Arg Lys Leu Ile Asp Asp Tyr
  110         115         120

Asp Ser Thr Lys Ser Gly Leu Asp His Lys Phe Gln Asp Asp Pro
  125         130         135

Asp Gly Leu His Gln Leu Asp Gly Thr Pro Leu Thr Ala Glu Asp
  140         145         150

Ile Val His Lys Ile Ala Ala Arg Ile Tyr Glu Glu Asn Asp Arg
  155         160         165

Ala Val Phe Asp Lys Ile Val Ser Lys Leu Leu Asn Leu Gly Leu
  170         175         180

Ile Thr Glu Ser Gln Ala His Thr Leu Glu Asp Glu Val Ala Glu
  185         190         195

Val Leu Gln Lys Leu Ile Ser Lys Glu Ala Asn Asn Tyr Glu Glu
  200         205         210

Asp Pro Asn Lys Pro Thr Ser Trp Thr Glu Asn Gln Ala Gly Lys
  215         220         225

Ile Pro Glu Lys Val Thr Pro Met Ala Ala Ile Gln Asp Gly Leu
  230         235         240

Ala Lys Gly Glu Asn Asp Glu Thr Val Ser Asn Thr Leu Thr Leu
  245         250         255

Thr Asn Gly Leu Glu Arg Arg Thr Lys Thr Tyr Ser Glu Asp Asn
  260         265         270

Phe Glu Glu Leu Gln Tyr Phe Pro Asn Phe Tyr Ala Leu Leu Lys
  275         280         285

Ser Ile Asp Ser Glu Lys Glu Ala Lys Glu Lys Glu Thr Leu Ile
  290         295         300

Thr Ile Met Lys Thr Leu Ile Asp Phe Val Lys Met Met Val Lys
  305         310         315

Tyr Gly Thr Ile Ser Pro Glu Glu Gly Val Ser Tyr Leu Glu Asn
  320         325         330

Leu Asp Glu Met Ile Ala Leu Gln Thr Lys Asn Lys Leu Glu Lys
  335         340         345

```

Sequence Listing - P3230R1C1.txt

Asn Ala Thr Asp Asn Ile Ser Lys Leu Phe Pro Ala Pro Ser Glu
 350 355 360

Lys Ser His Glu Glu Thr Asp Ser Thr Lys Glu Glu Ala Ala Lys
 365 370 375

Met Glu Lys Glu Tyr Gly Ser Leu Lys Asp Ser Thr Lys Asp Asp
 380 385 390

Asn Ser Asn Pro Gly Gly Lys Thr Asp Glu Pro Lys Gly Lys Thr
 395 400 405

Glu Ala Tyr Leu Glu Ala Ile Arg Lys Asn Ile Glu Trp Leu Lys
 410 415 420

Lys His Asp Lys Lys Gly Asn Lys Glu Asp Tyr Asp Leu Ser Lys
 425 430 435

Met Arg Asp Phe Ile Asn Lys Gln Ala Asp Ala Tyr Val Glu Lys
 440 445 450

Gly Ile Leu Asp Lys Glu Glu Ala Glu Ala Ile Lys Arg Ile Tyr
 455 460 465

Ser Ser Leu

<210> 151

<211> 2598

<212> DNA

<213> Homo Sapien

<400> 151

cggtctgagg ctcccgcag gagaaaggaa cattctgagg ggagtctaca 50

ccctgtggag ctcaagatgg tcctgagtgg ggcgtgtgc ttccgaatga 100

aggactcggc attgaaggtg ctttatctgc ataataacca gcttctagct 150

ggagggctgc atcaggggaa ggtcattaaa ggtgaagaga tcagcgtggt 200

ccccaatcgg tgggtgatg ccagcctgtc ccccgctc ctgggtgtcc 250

aggggtggaag ccagtcctg tcattgtggg tggggcagga gccgactcta 300

acactagagc cagtgaacat catggagctc tatcttggtg ccaaggaatc 350

caagagcttc accttctacc ggcgggacat ggggtcacc tccagcttcg 400

agtctgctgc ctacccgggc tggttcctgt gcacggtgcc tgaagccgat 450

cagcctgtca gactaccca gcttcccag aatggtggct ggaatgcccc 500

catcacagac ttctacttc agcagtgtga ctagggaac gtgccccca 550

Sequence Listing - P3230R1C1.txt

gaactccctg ggcagagcca gctcgggtga ggggtgagtg gaggagaccc 600
atggcggaca atcactctct ctgctctcag gacccccacg tctgacttag 650
tgggcacctg accactttgt ctctcggttc ccagtttgga taaattctga 700
gatttggagc tcagtccacg gtctccccc actggatggt gctactgctg 750
tggaaccttg taaaaacat gtggggtaaa ctgggaataa catgaaaaga 800
tttctgtggg ggtgggggtg gggagtggg ggaatcattc ctgcttaagt 850
gtaactgaca agtgttaccc tgagccccgc aggccaaccc atccccagt 900
gagccttata gggtcagtag ctctcccat gaagtcctgt cactcaccac 950
tgtgcaggag agggaggttg tcatagagtc agggatctat ggccttggc 1000
ccagccccac ccccttcct ttaatctgc cactgtcata tgctaccttt 1050
cctatctctt cctcatcat ctgtgttg gcatgaggag gtggtgatgt 1100
cagaagaat ggctcgagct cagaagataa aagataagta gggatgctg 1150
atcctctttt aaaaaccaa gatacaatca aaatcccaga tgctggctc 1200
tattcccatg aaaaagtgt catgacatat tgagaagacc tacttacaaa 1250
gtggcatata ttgcaattta ttttaattaa aagataccta tttatatatt 1300
tctttataga aaaaagtctg gaagagtta ctcaattgt agcaatgtca 1350
gggtggtggc agtatagggt attttcttt taattctgtt aatttatctg 1400
tatttcctaa ttttctaca atgaagatga attcctgtga taaaaataag 1450
aaaagaatt aatcttgagg taagcagagc agacatcatc tctgattgtc 1500
ctcagctccc acttccccag agtaaattca aattgaatcg agctctgctg 1550
ctctggttgg ttgtagtagt gatcaggaaa cagatctcag caagccact 1600
gaggaggagg ctgtgctgag ttgtgtggc tggaatctct gggtaaggaa 1650
cttaagaac aaaaatcatc tggaattct ttctagaag gatcacagcc 1700
cctgggattc caaggcattg gatccagtct ctaagaaggc tgctgtactg 1750
gttgaattgt gtccccctca aattcacatc ctctctggaa tctcagtctg 1800
tgagtttatt tggagataag gtctctgcag atgtagttag ttaagacaag 1850
gtcatgctgg atgaagtag acctaaattc aatatgactg gtttcttgt 1900
atgaaaagga gaggacacag agacagagga gacgcgggga agactatgta 1950

Sequence Listing - P3230R1C1.txt

aagatgaagg cagagatcgg agttttgcag ccacaagcta agaaacacca 2000
 aggattgtgg caaccatcag aagcttggaa gaggcaaaga agaattcttc 2050
 cctagaggct ttagagggat aacggctctg ctgaaacctt aatctcagac 2100
 ttccagcctc ctgaacgaag aaagaataaa ttctggctgt ttttagccac 2150
 caaggataat tgggtacagc agctctagga aactaatata gctgctaaaa 2200
 tgatccctgt ctctctgtgt ttacattctg tgtgtgtccc ctcccacaat 2250
 gtaccaaagt tgtctttgtg accaatagaa tatggcagaa gtgatggcat 2300
 gccacttcca agattagggt ataaaagaca ctgcagcttc tacttgagcc 2350
 ctctctctct gccaccacc gccccaatc tatcttggtc cactgcctct 2400
 gggggaagct agctgccatg ctatgagcag gcctataaag agacttacgt 2450
 ggtaaaaaat gaagtctctc gccacagcc acattagtga acctagaagc 2500
 agagactctg tgagataatc gatgtttgtt gttttaagtt gctcagtttt 2550
 ggtctaactt gttatgcagc aatagataaa taatagcag agaaagag 2598

<210> 152

<211> 155

<212> PRT

<213> Homo Sapien

<400> 152

Met Val Leu Ser Gly Ala Leu Cys Phe Arg Met Lys Asp Ser Ala

1 5 10 15

Leu Lys Val Leu Tyr Leu His Asn Asn Gln Leu Leu Ala Gly Gly

20 25 30

Leu His Ala Gly Lys Val Ile Lys Gly Glu Glu Ile Ser Val Val

35 40 45

Pro Asn Arg Trp Leu Asp Ala Ser Leu Ser Pro Val Ile Leu Gly

50 55 60

Val Gln Gly Gly Ser Gln Cys Leu Ser Cys Gly Val Gly Gln Glu

65 70 75

Pro Thr Leu Thr Leu Glu Pro Val Asn Ile Met Glu Leu Tyr Leu

80 85 90

Gly Ala Lys Glu Ser Lys Ser Phe Thr Phe Tyr Arg Arg Asp Met

95 100 105

Gly Leu Thr Ser Ser Phe Glu Ser Ala Ala Tyr Pro Gly Trp Phe

Sequence Listing - P3230R1C1.txt

110	115	120
Leu Cys Thr Val Pro Glu Ala Asp Gln Pro Val Arg Leu Thr Gln		
125	130	135
Leu Pro Glu Asn Gly Gly Trp Asn Ala Pro Ile Thr Asp Phe Tyr		
140	145	150
Phe Gln Gln Cys Asp		
155		

<210> 153
 <211> 1152
 <212> DNA
 <213> Homo Sapien

<400> 153
 cttcagaaca ggttctcctt ccccgatcac cagttgctcg agttagaatt 50
 gtctgaatg gccgccctgc agaaatctgt gagctctttc cttatgggga 100
 ccctggccac cagctgcctc cttctcttgg ccctcttggg acaggaggga 150
 gcagctgcgc ccatcagctc ccactgcagg cttgacaagt ccaactcca 200
 gcagccctat atcaccaacc gcaccttcat cctggctaag gaggctagct 250
 tggctgataa caacacagac gtctgtctca ttggggagaa actgttccac 300
 ggagtcagta tgagtgcgct ctgctatctg atgaagcagg tgctgaactt 350
 cacccttgaa gaagtgcctg tccctcaatc tgatagggtc cagccttata 400
 tgcaggagggt ggtgccttc ctggccaggc tcagcaacag gctaagcaca 450
 tgtcatattg aagggtatga cctgcatac cagaggaaatg tgcaaaagct 500
 gaaggacaca gtgaaaaagc ttggagagag tggagagatc aaagcaattg 550
 gagaactgga ttgctgttt atgtctctga gaaatgcctg catttgacca 600
 gagcaaaagt gaaaaatgaa taactaaccc ctttccctg ctagaataaa 650
 caattagatg ccccaaagcg attttttta accaaaagga agatgggaag 700
 ccaaactcca tcattgatgg tggattccaa atgaaccct gcgttagtta 750
 caagggaac caatgccact ttgtttata agaccagaag gtagacttcc 800
 taagcataga tatttattga taacattca ttgtaactgg tgttctatac 850
 acagaaaaca atttatttt taaataattg tctttttcca taaaaaagat 900
 tactttccat tcctttaggg gaaaaaaccc ctaaatagct tcattgtttc 950
 ataatcagta ctttatatt ataatgtat ttattattat tataagactg 1000

Sequence Listing - P3230R1C1.txt

cattttttt atatcatttt attaatatgg atttattat agaaacatca 1050
 ttcgatattg ctacttgagt gtaaggctaa tattgatatt tatgacaata 1100
 attatagagc tataacatgt ttattggacc tcaataaaca cttggatatt 1150
 cc 1152

<210> 154
 <211> 179
 <212> PRT
 <213> Homo Sapien

<400> 154
 Met Ala Ala Leu Gln Lys Ser Val Ser Ser Phe Leu Met Gly Thr
 1 5 10 15
 Leu Ala Thr Ser Cys Leu Leu Leu Ala Leu Leu Val Gln Gly
 20 25 30
 Gly Ala Ala Ala Pro Ile Ser Ser His Cys Arg Leu Asp Lys Ser
 35 40 45
 Asn Phe Gln Gln Pro Tyr Ile Thr Asn Arg Thr Phe Met Leu Ala
 50 55 60
 Lys Glu Ala Ser Leu Ala Asp Asn Asn Thr Asp Val Arg Leu Ile
 65 70 75
 Gly Glu Lys Leu Phe His Gly Val Ser Met Ser Glu Arg Cys Tyr
 80 85 90
 Leu Met Lys Gln Val Leu Asn Phe Thr Leu Glu Glu Val Leu Phe
 95 100 105
 Pro Gln Ser Asp Arg Phe Gln Pro Tyr Met Gln Glu Val Val Pro
 110 115 120
 Phe Leu Ala Arg Leu Ser Asn Arg Leu Ser Thr Cys His Ile Glu
 125 130 135
 Gly Asp Asp Leu His Ile Gln Arg Asn Val Gln Lys Leu Lys Asp
 140 145 150
 Thr Val Lys Lys Leu Gly Glu Ser Gly Glu Ile Lys Ala Ile Gly
 155 160 165
 Glu Leu Asp Leu Leu Phe Met Ser Leu Arg Asn Ala Cys Ile
 170 175

<210> 155
 <211> 1320
 <212> DNA
 <213> Homo Sapien

Sequence Listing - P3230R1C1.txt

<400> 155

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cccagcatgt accaggtcag tgcagagggc tgcctgaggg ctgtgctgag 150
agggagagga gcagagatgc tgctgagggg ggagggaggg caagctgcca 200
ggtttggggc tgggggccaa gtggagtgag aaactgggat cccaggggga 250
gggtgcagat gagggagcga cccagattag gtgaggacag ttctctcatt 300
agccttttc tacaggtggg tgcttcttg gcaatggtca tgggaaccca 350
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tgcgtcagcc tacagacagg ctccacatg gaccccggg gcaactcgga 650
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gctggtgtcc tgtcatttc tctcagaaa ggttttcaa gttctgcca 1050
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tactttgggt gcattctagt gtagttacta gtctttgac atggatgatt 1250
ctgaggagga agctgttatt gaatgtatag agatttatcc aaataaatat 1300
ctttatttaa aaatgaaaaa 1320

```

Sequence Listing - P3230R1C1.txt

<210> 156

<211> 177

<212> PRT

<213> Homo Sapien

<400> 156

Met Arg Glu Arg Pro Arg Leu Gly Glu Asp Ser Ser Leu Ile Ser
1 5 10 15

Leu Phe Leu Gln Val Val Ala Phe Leu Ala Met Val Met Gly Thr
20 25 30

His Thr Tyr Ser His Trp Pro Ser Cys Cys Pro Ser Lys Gly Gln
35 40 45

Asp Thr Ser Glu Glu Leu Leu Arg Trp Ser Thr Val Pro Val Pro
50 55 60

Pro Leu Glu Pro Ala Arg Pro Asn Arg His Pro Glu Ser Cys Arg
65 70 75

Ala Ser Glu Asp Gly Pro Leu Asn Ser Arg Ala Ile Ser Pro Trp
80 85 90

Arg Tyr Glu Leu Asp Arg Asp Leu Asn Arg Leu Pro Gln Asp Leu
95 100 105

Tyr His Ala Arg Cys Leu Cys Pro His Cys Val Ser Leu Gln Thr
110 115 120

Gly Ser His Met Asp Pro Arg Gly Asn Ser Glu Leu Leu Tyr His
125 130 135

Asn Gln Thr Val Phe Tyr Arg Arg Pro Cys His Gly Glu Lys Gly
140 145 150

Thr His Lys Gly Tyr Cys Leu Glu Arg Arg Leu Tyr Arg Val Ser
155 160 165

Leu Ala Cys Val Cys Val Arg Pro Arg Val Met Gly
170 175

<210> 157

<211> 1515

<212> DNA

<213> Homo Sapien

<400> 157

ccggcgatgt cgctcgtgct gctaagcctg gccgcgctgt gcaggagcgc 50

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cagagtggat gctacaacat gatctaattcc ccggagactt gagggacctc 150

Sequence Listing - P3230R1C1.txt

cgagtagaac ctgttacaac tagtgttgca acaggggact attcaatttt 200
 gatgaatgta agctgggtac tccgggcaga tgcagcatc cgctgttga 250
 aggccacca gatttgtgtg acgggcaaaa gcaactcca gtctacagc 300
 tgtgtgaggt gcaattacac agaggccttc cagactcaga ccagaccctc 350
 tgggtgtaaa tggacatttt cctacatcgg ctccctgta gagctgaaca 400
 cagtctattt cattggggcc cataatatc ctaatgcaaa tatgaatgaa 450
 gatggccctt ccatgtctgt gaatttcacc tcaccaggct gcctagacca 500
 cataatgaaa tataaaaaaa agtgtgtcaa ggccggaagc ctgtgggata 550
 cgaacatcac tgcttgaag aagaatgagg agacagtaga agtgaacttc 600
 acaaccactc ccctgggaaa cagatacatg gctcttatcc aacacagcac 650
 tatcatcggg ttttctcagg tgtttgagcc acaccagaag aaacaaacgc 700
 gagcttcagt ggtgattcca gtgactgggg atagtgaagg tgctacgggt 750
 cagctgactc catattttcc tacttgggc agcgactgca tccgacataa 800
 aggaacagtt gtgctctgcc cacaacagg cgtcccttc cctctggata 850
 acaacaaaag caagccggga ggctggctgc ctctctctc gctgtctctg 900
 ctggtggcca catgggtgct ggtggcaggg atctatctaa tgtggaggca 950
 cgaaaggatc aagaagactt cttttctac caccacata ctgccccca 1000
 ttaaggttct tgtggtttac ccactgaaa tatgtttcca tcacacaatt 1050
 tgttacttca ctgaatttct tcaaaacct tgcagaagtg aggtcatcct 1100
 tgaaaagtgg cagaaaaaga aaatagcaga gatgggtcca gtgcagtggc 1150
 ttgccactca aaagaaggca gcagacaaag tcgtcttct tctttccaat 1200
 gacgtcaaca gtgtgtgcga tggtagctgt ggcaagagcg agggcagctc 1250
 cagtgagaac tctcaagacc tcttccccct tgcctttaac ctttttgca 1300
 gtgatctaag aagccagatt catctgcaca aatacgtggt ggtctacttt 1350
 agagagattg atacaaaaga cgattacaat gtctcagtg tctgccccaa 1400
 gtaccacctc atgaaggatg cactgcttt ctgtgcagaa cttctccatg 1450
 tcaagcagca ggtgtcagca gaaaaaagat cacaagcctg ccacgatggc 1500
 tgctgtctct tgtag 1515

Sequence Listing - P3230R1C1.txt

<210> 158

<211> 502

<212> PRT

<213> Homo Sapien

<400> 158

Met Ser Leu Val Leu Leu Ser Leu Ala Ala Leu Cys Arg Ser Ala
1 5 10 15

Val Pro Arg Glu Pro Thr Val Gln Cys Gly Ser Glu Thr Gly Pro
20 25 30

Ser Pro Glu Trp Met Leu Gln His Asp Leu Ile Pro Gly Asp Leu
35 40 45

Arg Asp Leu Arg Val Glu Pro Val Thr Thr Ser Val Ala Thr Gly
50 55 60

Asp Tyr Ser Ile Leu Met Asn Val Ser Trp Val Leu Arg Ala Asp
65 70 75

Ala Ser Ile Arg Leu Leu Lys Ala Thr Lys Ile Cys Val Thr Gly
80 85 90

Lys Ser Asn Phe Gln Ser Tyr Ser Cys Val Arg Cys Asn Tyr Thr
95 100 105

Glu Ala Phe Gln Thr Gln Thr Arg Pro Ser Gly Gly Lys Thr Thr
110 115 120

Phe Ser Tyr Ile Gly Phe Pro Val Glu Leu Asn Thr Val Tyr Phe
125 130 135

Ile Gly Ala His Asn Ile Pro Asn Ala Asn Met Asn Glu Asp Gly
140 145 150

Pro Ser Met Ser Val Asn Phe Thr Ser Pro Gly Cys Leu Asp His
155 160 165

Ile Met Lys Tyr Lys Lys Lys Cys Val Lys Ala Gly Ser Leu Trp
170 175 180

Asp Pro Asn Ile Thr Ala Cys Lys Lys Asn Glu Glu Thr Val Glu
185 190 195

Val Asn Phe Thr Thr Thr Pro Leu Gly Asn Arg Tyr Met Ala Leu
200 205 210

Ile Gln His Ser Thr Ile Ile Gly Phe Ser Gln Val Phe Glu Pro
215 220 225

His Gln Lys Lys Gln Thr Arg Ala Ser Val Val Ile Pro Val Thr
230 235 240

Sequence Listing - P3230R1C1.txt

Gly Asp Ser Glu Gly Ala Thr Val Gln Leu Thr Pro Tyr Phe Pro
 245 250 255

Thr Cys Gly Ser Asp Cys Ile Arg His Lys Gly Thr Val Val Leu
 260 265 270

Cys Pro Gln Thr Gly Val Pro Phe Pro Leu Asp Asn Asn Lys Ser
 275 280 285

Lys Pro Gly Gly Trp Leu Pro Leu Leu Leu Leu Ser Leu Leu Val
 290 295 300

Ala Thr Trp Val Leu Val Ala Gly Ile Tyr Leu Met Trp Arg His
 305 310 315

Glu Arg Ile Lys Lys Thr Ser Phe Ser Thr Thr Thr Leu Leu Pro
 320 325 330

Pro Ile Lys Val Leu Val Val Tyr Pro Ser Glu Ile Cys Phe His
 335 340 345

His Thr Ile Cys Tyr Phe Thr Glu Phe Leu Gln Asn His Cys Arg
 350 355 360

Ser Glu Val Ile Leu Glu Lys Trp Gln Lys Lys Lys Ile Ala Glu
 365 370 375

Met Gly Pro Val Gln Trp Leu Ala Thr Gln Lys Lys Ala Ala Asp
 380 385 390

Lys Val Val Phe Leu Leu Ser Asn Asp Val Asn Ser Val Cys Asp
 395 400 405

Gly Thr Cys Gly Lys Ser Glu Gly Ser Pro Ser Glu Asn Ser Gln
 410 415 420

Asp Leu Phe Pro Leu Ala Phe Asn Leu Phe Cys Ser Asp Leu Arg
 425 430 435

Ser Gln Ile His Leu His Lys Tyr Val Val Val Tyr Phe Arg Glu
 440 445 450

Ile Asp Thr Lys Asp Asp Tyr Asn Ala Leu Ser Val Cys Pro Lys
 455 460 465

Tyr His Leu Met Lys Asp Ala Thr Ala Phe Cys Ala Glu Leu Leu
 470 475 480

His Val Lys Gln Gln Val Ser Ala Gly Lys Arg Ser Gln Ala Cys
 485 490 495

His Asp Gly Cys Cys Ser Leu
 500

Sequence Listing - P3230R1C1.txt

<211> 535

<212> DNA

<213> Homo Sapien

<400> 159

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 caagtacttg ctgctgtcga tattggggct tgcctttctg agtgaggcgg 100
 cagctcggaa aatcccaaaa gtaggacata ctttttcca aaagcctgag 150
 agttgccgcg ctgtgccagg aggtagtatg aagcttgaca ttggcatcat 200
 caatgaaaac cagcgcgttt ccatgtcacg taacatcgag agccgctcca 250
 cctccccctg gaattacact gtcacttggg accccaaccg gtaccctcg 300
 gaagttgtac aggcccagtg taggaacttg ggctgcatca atgctcaagg 350
 aaaggaagac atctccatga attcgttcc catcagcaa gagaccctgg 400
 tcgtccggag gaagaccaa ggctgctctg tttcttcca gttggagaag 450
 gtgtgggtga ctgtggctg cactgcgtc accctgtga tccaccatgt 500
 gcagtaagag gtgcatatcc actcagctga agaag 535

<210> 160

<211> 163

<212> PRT

<213> Homo Sapien

<400> 160

Met	Thr	Val	Lys	Thr	Leu	His	Gly	Pro	Ala	Met	Val	Lys	Tyr	Leu
1			5				10				15			
Leu	Leu	Ser	Ile	Leu	Gly	Leu	Ala	Phe	Leu	Ser	Glu	Ala	Ala	Ala
	20			25			30							
Arg	Lys	Ile	Pro	Lys	Val	Gly	His	Thr	Phe	Phe	Gln	Lys	Pro	Glu
	35				40				45					
Ser	Cys	Pro	Pro	Val	Pro	Gly	Gly	Ser	Met	Lys	Leu	Asp	Ile	Gly
	50				55				60					
Ile	Ile	Asn	Glu	Asn	Gln	Arg	Val	Ser	Met	Ser	Arg	Asn	Ile	Glu
	65				70				75					
Ser	Arg	Ser	Thr	Ser	Pro	Trp	Asn	Tyr	Thr	Val	Thr	Trp	Asp	Pro
	80				85				90					
Asn	Arg	Tyr	Pro	Ser	Glu	Val	Val	Gln	Ala	Gln	Cys	Arg	Asn	Leu
	95				100				105					
Gly	Cys	Ile	Asn	Ala	Gln	Gly	Lys	Glu	Asp	Ile	Ser	Met	Asn	Ser

Sequence Listing - P3230R1C1.txt

110	115	120
Val Pro Ile Gln Gln Glu Thr Leu Val Val Arg Arg Lys His Gln		
125	130	135
Gly Cys Ser Val Ser Phe Gln Leu Glu Lys Val Leu Val Thr Val		
140	145	150
Gly Cys Thr Cys Val Thr Pro Val Ile His His Val Gln		
155	160	

<210> 161

<211> 2380

<212> DNA

<213> Homo Sapien

<400> 161

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gtcaggactc ccaggacaga gactgcacaa actaccagc acagccccct 100
ccgccccctc tggaggctga agagggatc cagccccctc caccacaga 150
cacgggctga ctgggggtgc tccccctt gggggggggc agcacagggc 200
ctcaggcctg ggtgccactc ggcacctaga agatgcctgt gccctggttc 250
ttgctgtcct tggcactggg ccgaagccca gtggtccttt ctctggagag 300
gcttggtggg cctcaggacg ctaccactg ctctccgggc ctctctgccc 350
gcctctggga cagtgcata ctctgcctgc ctggggacat cgtgctgct 400
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tggcgtgca tgggcactgg gaagagcctg aagatgagga aaagtgtgga 550
ggagcagctg actcaggggt ggaggagcct aggaatgcct ctctccaggc 600
ccaagtctg ctctccttc aggcctacc tactgccgc tgcgtcctgc 650
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agctgctctc cctgccctgg ctcaactgtg cagcagatgg tgacaactg 850
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ctggaccgca gatcattacc ttgaaccaca cagacctggt tcctgtcctc 1000

```

Sequence Listing - P3230R1C1.txt

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 gactgcgact gctgacctg cagagctggc tgctggacgc accgtgctcg 1150
 ctgccccag aagcggcact gtgctggcgg gctccgggtg gggacccctg 1200
 ccagccactg gtcccaccgc ttctctggga gaacgtcact gtggacaagg 1250
 ttctcgagtt ccatttctg aaaggccacc ctaacctctg tgttcaggtg 1300
 aacagctcgg agaagctgca gctgcaggag tgcttgtagg ctgactccct 1350
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 agcaaagcct ccagcagggc agctcgcctt ggagagtact tactacaaga 1500
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 caaaaaggat cagcgaaaag ggtggctgag gctcttgaaa caggacgtcc 1700
 gctcgggggc ggcgcacagg ggcgcgcggc ctctgctct ctactagcc 1750
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 ccagctgccg ctgcgcgtgg ccgtagacct gtggagccgt cgtgaactga 1850
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 gtgcagcgag tggctacagg atgggggtgc cgggcccggg gcgcacggcc 2000
 cgcacgacgc cttecgcgcc tcgtcagct gcgtgctgcc gcacttcttg 2050
 cagggccggg cgcccgagct ctacgtgggg gcctgcttc acaggctgct 2100
 ccacccggac gccgtaccg ccttttccg caccgtgcc gtcttcacac 2150
 tgccctccca actgccagac ttctggggg cctgcagca gctcgcgcc 2200
 ccgcgttccg ggcggctcca agagagagcg gagcaagtgt cccgggccct 2250
 tcagccagcc ctggatagct acttccatcc cccggggact cccgcgccgg 2300
 gacgcggggg gggaccaggg gcggggacct gggcggggga cgggacctaa 2350

Sequence Listing - P3230R1C1.txt

ataaaggcag acgctgtttt tctaaaaaa 2380

<210> 162

<211> 705

<212> PRT

<213> Homo Sapien

<400> 162

Met Pro Val Pro Trp Phe Leu Leu Ser Leu Ala Leu Gly Arg Ser
1 5 10 15

Pro Val Val Leu Ser Leu Glu Arg Leu Val Gly Pro Gln Asp Ala
20 25 30

Thr His Cys Ser Pro Gly Leu Ser Cys Arg Leu Trp Asp Ser Asp
35 40 45

Ile Leu Cys Leu Pro Gly Asp Ile Val Pro Ala Pro Gly Pro Val
50 55 60

Leu Ala Pro Thr His Leu Gln Thr Glu Leu Val Leu Arg Cys Gln
65 70 75

Lys Glu Thr Asp Cys Asp Leu Cys Leu Arg Val Ala Val His Leu
80 85 90

Ala Val His Gly His Trp Glu Glu Pro Glu Asp Glu Glu Lys Phe
95 100 105

Gly Gly Ala Ala Asp Ser Gly Val Glu Glu Pro Arg Asn Ala Ser
110 115 120

Leu Gln Ala Gln Val Val Leu Ser Phe Gln Ala Tyr Pro Thr Ala
125 130 135

Arg Cys Val Leu Leu Glu Val Gln Val Pro Ala Ala Leu Val Gln
140 145 150

Phe Gly Gln Ser Val Gly Ser Val Val Tyr Asp Cys Phe Glu Ala
155 160 165

Ala Leu Gly Ser Glu Val Arg Ile Trp Ser Tyr Thr Gln Pro Arg
170 175 180

Tyr Glu Lys Glu Leu Asn His Thr Gln Gln Leu Pro Ala Leu Pro
185 190 195

Trp Leu Asn Val Ser Ala Asp Gly Asp Asn Val His Leu Val Leu
200 205 210

Asn Val Ser Glu Glu Gln His Phe Gly Leu Ser Leu Tyr Trp Asn
215 220 225

Gln Val Gln Gly Pro Pro Lys Pro Arg Trp His Lys Asn Leu Thr
230 235 240

Sequence Listing - P3230R1C1.txt

Gly Pro Gln Ile Ile Thr Leu Asn His Thr Asp Leu Val Pro Cys
245 250 255

Leu Cys Ile Gln Val Trp Pro Leu Glu Pro Asp Ser Val Arg Thr
260 265 270

Asn Ile Cys Pro Phe Arg Glu Asp Pro Arg Ala His Gln Asn Leu
275 280 285

Trp Gln Ala Ala Arg Leu Arg Leu Leu Thr Leu Gln Ser Trp Leu
290 295 300

Leu Asp Ala Pro Cys Ser Leu Pro Ala Glu Ala Ala Leu Cys Trp
305 310 315

Arg Ala Pro Gly Gly Asp Pro Cys Gln Pro Leu Val Pro Pro Leu
320 325 330

Ser Trp Glu Asn Val Thr Val Asp Lys Val Leu Glu Phe Pro Leu
335 340 345

Leu Lys Gly His Pro Asn Leu Cys Val Gln Val Asn Ser Ser Glu
350 355 360

Lys Leu Gln Leu Gln Glu Cys Leu Trp Ala Asp Ser Leu Gly Pro
365 370 375

Leu Lys Asp Asp Val Leu Leu Leu Glu Thr Arg Gly Pro Gln Asp
380 385 390

Asn Arg Ser Leu Cys Ala Leu Glu Pro Ser Gly Cys Thr Ser Leu
395 400 405

Pro Ser Lys Ala Ser Thr Arg Ala Ala Arg Leu Gly Glu Tyr Leu
410 415 420

Leu Gln Asp Leu Gln Ser Gly Gln Cys Leu Gln Leu Trp Asp Asp
425 430 435

Asp Leu Gly Ala Leu Trp Ala Cys Pro Met Asp Lys Tyr Ile His
440 445 450

Lys Arg Trp Ala Leu Val Trp Leu Ala Cys Leu Leu Phe Ala Ala
455 460 465

Ala Leu Ser Leu Ile Leu Leu Leu Lys Lys Asp His Ala Lys Gly
470 475 480

Trp Leu Arg Leu Leu Lys Gln Asp Val Arg Ser Gly Ala Ala Ala
485 490 495

Arg Gly Arg Ala Ala Leu Leu Leu Tyr Ser Ala Asp Asp Ser Gly
500 505 510

Sequence Listing - P3230R1C1.txt

Phe Glu Arg Leu Val Gly Ala Leu Ala Ser Ala Leu Cys Gln Leu
515 520 525

Pro Leu Arg Val Ala Val Asp Leu Trp Ser Arg Arg Glu Leu Ser
530 535 540

Ala Gln Gly Pro Val Ala Trp Phe His Ala Gln Arg Arg Gln Thr
545 550 555

Leu Gln Glu Gly Gly Val Val Val Leu Leu Phe Ser Pro Gly Ala
560 565 570

Val Ala Leu Cys Ser Glu Trp Leu Gln Asp Gly Val Ser Gly Pro
575 580 585

Gly Ala His Gly Pro His Asp Ala Phe Arg Ala Ser Leu Ser Cys
590 595 600

Val Leu Pro Asp Phe Leu Gln Gly Arg Ala Pro Gly Ser Tyr Val
605 610 615

Gly Ala Cys Phe Asp Arg Leu Leu His Pro Asp Ala Val Pro Ala
620 625 630

Leu Phe Arg Thr Val Pro Val Phe Thr Leu Pro Ser Gln Leu Pro
635 640 645

Asp Phe Leu Gly Ala Leu Gln Gln Pro Arg Ala Pro Arg Ser Gly
650 655 660

Arg Leu Gln Glu Arg Ala Glu Gln Val Ser Arg Ala Leu Gln Pro
665 670 675

Ala Leu Asp Ser Tyr Phe His Pro Pro Gly Thr Pro Ala Pro Gly
680 685 690

Arg Gly Val Gly Pro Gly Ala Gly Pro Gly Ala Gly Asp Gly Thr
695 700 705

<210> 163

<211> 2478

<212> DNA

<213> Homo Sapien

<400> 163

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tgagatcgat tcagatgatt gttcacccta cccccacgcc aatccgtgca 150

ggcgatggcc accggctaac cctggaagac atcttccatg acctgttcta 200

ccacttagag ctccaggtca accgcaccta ccaaatgcac cttggaggga 250

Sequence Listing - P3230R1C1.txt

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 ggcaccatca tgatttgcgt tccacactgg gccaaaggaga gtgcccccta 350
 catgtgccga gtgaagacac tgcagaccg gacatggacc tactctctt 400
 ccggagcctt cctgttctcc atgggcttcc tcgtcgagtc actctgtac 450
 ctgagctaca gatatgtcac caagccgctt gcacctccca actccctgaa 500
 cgtccagcga gtctgactt tccagccgct gcgcttcac caggagcacg 550
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 gtccagtact ccagatcag ggtgtctgga ccaggggagc ccgaggagc 650
 tccacagcgg catagcctgt ccgagatcac ctacttaggg cagccagaca 700
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 acctcagggt acccccgaag ctcaattccc attctacgcc ccacaggcca 850
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 tggcctcctt cctatggggt atgcattgaa ggttctgga aagactcccc 950
 cactgggaca ctttctagtc ctaaacacct taggcctaaa ggtcagcttc 1000
 agaaagagcc accagctgga agctgcatgt taggtggcct ttctctgag 1050
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 ccagcccctg gggatttgca cagacagaac atctgacca aatgtgtac 1150
 acagtgggga ggaagggaca ccacagtacc taaagggcca gctccccct 1200
 ctctctcag tccagatcga gggccacccc atgtccctcc ctttgcaacc 1250
 tcttccggt ccatgttccc cctcgacca aggtccaagt ccttggggccc 1300
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 atgcctgccc atgccacaca ctctgcgac tggcctcaga cgggtgcct 1550
 tgagagaagc agagggagtg gcatgcaggg ccctgccat ggggtgcctc 1600
 ctccaccgaa caaagcagca tgataaggac tgcagcgggg gagctctggg 1650

Sequence Listing - P3230R1C1.txt

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atgcagctgc aaggaggaaa tgcagggaaa ctcccagggt ccagagcccc 1750
acctctaac accatggatt caaagtgtc agggaatttg cctctccttg 1800
ccccattcct ggccagtttc acaatctagc tcgacagagc atgaggcccc 1850
tgctcttct gtcattgttc aaaggtggga agagagcctg gaaaagaacc 1900
aggcctggaa aagaaccaga aggaggctgg gcagaaccag aacaacctgc 1950
acttctgcca aggccagggc cagcaggacg gcaggactct agggaggggt 2000
gtggcctgca gctcattccc agccagggca actgcctgac gttgcacgat 2050
ttcagcttca ttctctgat agaacaagc gaaatgcagg tccaccaggg 2100
agggagacac acaagccttt tctcagggca ggagtttcag accctatcct 2150
gagaatgggg ttgaaagga aggtgagggc tgtggccctt ggacgggtac 2200
aataacacac tgtactgat tcacaacttt gcaagctctg ccttgggttc 2250
agcccatctg ggctcaaatt ccagcctcac cactcacaag ctgtgtgact 2300
tcaaacaaat gaaatcagtg cccagaacct cggtttctc atctgtaatg 2350
tggggatcat aacacctacc tcattggagtt gtgggtgaaga tgaatgaag 2400
tcattgtctt aaagtgtta atagtgcctg gtacatgggc agtgcccaat 2450
aaacggtagc tatttaaaaa aaaaaaaa 2478

<210> 164

<211> 574

<212> PRT

<213> Homo Sapien

<400> 164

Met Arg Thr Leu Leu Thr Ile Leu Thr Val Gly Ser Leu Ala Ala

1 5 10 15

His Ala Pro Glu Asp Pro Ser Asp Leu Leu Gln His Val Lys Phe

20 25 30

Gln Ser Ser Asn Phe Glu Asn Ile Leu Thr Trp Asp Ser Gly Pro

35 40 45

Glu Gly Thr Pro Asp Thr Val Tyr Ser Ile Glu Tyr Lys Thr Tyr

50 55 60

Gly Glu Arg Asp Trp Val Ala Lys Lys Gly Cys Gln Arg Ile Thr

65 70 75

Sequence Listing - P3230R1C1.txt

```

Arg Lys Ser Cys Asn Leu Thr Val Glu Thr Gly Asn Leu Thr Glu
  80              85              90

Leu Tyr Tyr Ala Arg Val Thr Ala Val Ser Ala Gly Gly Arg Ser
  95              100             105

Ala Thr Lys Met Thr Asp Arg Phe Ser Ser Leu Gln His Thr Thr
  110             115             120

Leu Lys Pro Pro Asp Val Thr Cys Ile Ser Lys Val Arg Ser Ile
  125             130             135

Gln Met Ile Val His Pro Thr Pro Thr Pro Ile Arg Ala Gly Asp
  140             145             150

Gly His Arg Leu Thr Leu Glu Asp Ile Phe His Asp Leu Phe Tyr
  155             160             165

His Leu Glu Leu Gln Val Asn Arg Thr Tyr Gln Met His Leu Gly
  170             175             180

Gly Lys Gln Arg Glu Tyr Glu Phe Phe Gly Leu Thr Pro Asp Thr
  185             190             195

Glu Phe Leu Gly Thr Ile Met Ile Cys Val Pro Thr Trp Ala Lys
  200             205             210

Glu Ser Ala Pro Tyr Met Cys Arg Val Lys Thr Leu Pro Asp Arg
  215             220             225

Thr Trp Thr Tyr Ser Phe Ser Gly Ala Phe Leu Phe Ser Met Gly
  230             235             240

Phe Leu Val Ala Val Leu Cys Tyr Leu Ser Tyr Arg Tyr Val Thr
  245             250             255

Lys Pro Pro Ala Pro Pro Asn Ser Leu Asn Val Gln Arg Val Leu
  260             265             270

Thr Phe Gln Pro Leu Arg Phe Ile Gln Glu His Val Leu Ile Pro
  275             280             285

Val Phe Asp Leu Ser Gly Pro Ser Ser Leu Ala Gln Pro Val Gln
  290             295             300

Tyr Ser Gln Ile Arg Val Ser Gly Pro Arg Glu Pro Ala Gly Ala
  305             310             315

Pro Gln Arg His Ser Leu Ser Glu Ile Thr Tyr Leu Gly Gln Pro
  320             325             330

Asp Ile Ser Ile Leu Gln Pro Ser Asn Val Pro Pro Pro Gln Ile
  335             340             345

Leu Ser Pro Leu Ser Tyr Ala Pro Asn Ala Ala Pro Glu Val Gly

```

Sequence Listing - P3230R1C1.txt

```

350          355          360
Pro Pro Ser Tyr Ala Pro Gln Val Thr Pro Glu Ala Gln Phe Pro
365          370          375
Phe Tyr Ala Pro Gln Ala Ile Ser Lys Val Gln Pro Ser Ser Tyr
380          385          390
Ala Pro Gln Ala Thr Pro Asp Ser Trp Pro Pro Ser Tyr Gly Val
395          400          405
Cys Met Glu Gly Ser Gly Lys Asp Ser Pro Thr Gly Thr Leu Ser
410          415          420
Ser Pro Lys His Leu Arg Pro Lys Gly Gln Leu Gln Lys Glu Pro
425          430          435
Pro Ala Gly Ser Cys Met Leu Gly Gly Leu Ser Leu Gln Glu Val
440          445          450
Thr Ser Leu Ala Met Glu Glu Ser Gln Glu Ala Lys Ser Leu His
455          460          465
Gln Pro Leu Gly Ile Cys Thr Asp Arg Thr Ser Asp Pro Asn Val
470          475          480
Leu His Ser Gly Glu Glu Gly Thr Pro Gln Tyr Leu Lys Gly Gln
485          490          495
Leu Pro Leu Leu Ser Ser Val Gln Ile Glu Gly His Pro Met Ser
500          505          510
Leu Pro Leu Gln Pro Pro Ser Gly Pro Cys Ser Pro Ser Asp Gln
515          520          525
Gly Pro Ser Pro Trp Gly Leu Leu Glu Ser Leu Val Cys Pro Lys
530          535          540
Asp Glu Ala Lys Ser Pro Ala Pro Glu Thr Ser Asp Leu Glu Gln
545          550          555
Pro Thr Glu Leu Asp Ser Leu Phe Arg Gly Leu Ala Leu Thr Val
560          565          570
Gln Trp Glu Ser

```

<210> 165

<211> 1060

<212> DNA

<213> Homo Sapien

<400> 165

tggcctactg gaaaaaaaaa aaaaaaaaaa aaaagtcacc cgggccgcgcg 50

Sequence Listing - P3230R1C1.txt

gtggccacaa catggctgcg ggcgggggc tgctttctg gctgttctg 100
ctgggggccc tctggtgggt cccgggccg tcggatctca gccacggacg 150
gcgtttctcg gacctcaag tgtgcgggga cgaagagtgc agcatgttaa 200
tgtaccgtgg gaaagctctt gaagacttca cgggccctga ttgtcgtttt 250
gtgaatttta aaaaagggtga cgaatgtatg gtctactaca aactggcagg 300
gggatccctt gaactttggg ctggaagtgt tgaacacagt ttggatatt 350
ttccaaaaga ttgatcaag gtacttcata aatacacgga agaagagcta 400
catattccag cagatgagac agactttgtc tgctttgaag gaggaagaga 450
tgattttaat agttataatg tagaagagct ttaggatctc ttggaactgg 500
aggactctgt acctgaagag tcgaagaagc ctgaagaagt ttctcagcac 550
agagagaaat ctctgagga gtctcggggg cgtgaacttg accctgtgcc 600
tgagcccgag gcattcagag ctgattcaga ggatggagaa ggtgctttct 650
cagagagcac cgaggggctg cagggacagc cctcagctca ggagagccac 700
cctcacacca gcggtcctgc ggctaacgct cagggaagtgc agtctcgtt 750
ggacactttt gaagaaattc tgcacgataa attgaaagtg ccgggaagcg 800
aaagcagaac tggcaatagt tctctgctc cggtggagcg ggagaagaca 850
gatgcttaca aagtcctgaa aacagaaatg agtcagagag gaagtggaca 900
gtgcgttatt cattacagca aaggatttcg ttggcatcaa aatctaagtt 950
tgttttacaa agattgtttt tagtactaag ctgccttggc agtttgcat 1000
tttgagccaa acaaaaatat attattttcc cttctaagta aaaaaaaaaa 1050
aaaaaaaaa 1060

<210> 166

<211> 303

<212> PRT

<213> Homo Sapien

<400> 166

Met Ala Ala Pro Gly Leu Leu Phe Trp Leu Phe Val Leu Gly

1 5 10 15

Ala Leu Trp Val Pro Gly Gln Ser Asp Leu Ser His Gly Arg

20 25 30

Arg Phe Ser Asp Leu Lys Val Cys Gly Asp Glu Glu Cys Ser Met

35 40 45

Sequence Listing - P3230R1C1.txt

Leu Met Tyr Arg Gly Lys Ala Leu Glu Asp Phe Thr Gly Pro Asp
 50 55 60
 Cys Arg Phe Val Asn Phe Lys Lys Gly Asp Val Tyr Val Tyr
 65 70 75
 Tyr Lys Leu Ala Gly Gly Ser Leu Glu Leu Trp Ala Gly Ser Val
 80 85 90
 Glu His Ser Phe Gly Tyr Phe Pro Lys Asp Leu Ile Lys Val Leu
 95 100 105
 His Lys Tyr Thr Glu Glu Glu Leu His Ile Pro Ala Asp Glu Thr
 110 115 120
 Asp Phe Val Cys Phe Glu Gly Gly Arg Asp Asp Phe Asn Ser Tyr
 125 130 135
 Asn Val Glu Glu Leu Leu Gly Ser Leu Glu Leu Glu Asp Ser Val
 140 145 150
 Pro Glu Glu Ser Lys Lys Ala Glu Glu Val Ser Gln His Arg Glu
 155 160 165
 Lys Ser Pro Glu Glu Ser Arg Gly Arg Glu Leu Asp Pro Val Pro
 170 175 180
 Glu Pro Glu Ala Phe Arg Ala Asp Ser Glu Asp Gly Glu Gly Ala
 185 190 195
 Phe Ser Glu Ser Thr Glu Gly Leu Gln Gly Gln Pro Ser Ala Gln
 200 205 210
 Glu Ser His Pro His Thr Ser Gly Pro Ala Ala Asn Ala Gln Gly
 215 220 225
 Val Gln Ser Ser Leu Asp Thr Phe Glu Glu Ile Leu His Asp Lys
 230 235 240
 Leu Lys Val Pro Gly Ser Glu Ser Arg Thr Gly Asn Ser Ser Pro
 245 250 255
 Ala Ser Val Glu Arg Glu Lys Thr Asp Ala Tyr Lys Val Leu Lys
 260 265 270
 Thr Glu Met Ser Gln Arg Gly Ser Gly Gln Cys Val Ile His Tyr
 275 280 285
 Ser Lys Gly Phe Arg Trp His Gln Asn Leu Ser Leu Phe Tyr Lys
 290 295 300
 Asp Cys Phe

Sequence Listing - P3230R1C1.txt

<210> 167

<211> 2570

<212> DNA

<213> Homo Sapien

<400> 167

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ccaggaccagg ggcgcaccgg ctcagcctct cacttgctag aggccgggga 50
agagaagcaa agcgcaacgg tgtggtccaa gccgggggctt ctgttcgcc 100
tctaggacat acacgggacc ccctaactc agtcccca acgcgcacc 150
tcgaagtctt gaactccagc cccgcacatc cagcgcgggc acaggcgcg 200
caggcggcag gtcccggcgg aaggcgatgc gcgcaggggg tcgggcagct 250
gggctcgggc ggcgggagta gggcccgga gggaggcagg gaggctgcat 300
attcagagtc gcgggtgcg ccttgggcag aggccgcct cgctccacgc 350
aacacctgct gctgccaccg cgccgcgatg agccgcgtgg tctcgctgct 400
gtgtgggcgc gcgctgctc gcggccacgg agccttctgc gcgcgcgtgg 450
tcagcgcca aaaggtgtgt ttgctgact tcaagcatc ctgtacaaa 500
atggcctact tccatgaact gtccagccga gtgagcttc agggagcagc 550
cctggcttgt gagagtgagg gaggagtcct cctcagcctt gagaatgaag 600
cagaacagaa gttaatagag agcatgttc aaaacctgac aaaacccggg 650
acagggattt ctgatggtga ttctggata gggctttgga ggaatggaga 700
tgggcaaa cactgtgcct gccagatct ctaccagtgg tctgatggaa 750
gcaattccca gtaccgaaac tgggtacacag atgaaccttc ctgcggaagt 800
gaaaagtgtg ttgtgatgta tcaccaacca actgccaatc ctggccttgg 850
gggtccctac cttaccagt ggaatgatga cagggtgaac atgaagcaca 900
attatatttg caagtatgaa ccagagatta atccaacagc ccctgtagaa 950
aagccttctc ttacaaatca accaggagac acccatcaga atgtggtgt 1000
tactgaagca ggtataattc ccaatctaat ttatgtgtt ataccaaaa 1050
taccctgct cttactgata ctggttgctt ttggaacctg ttgttccag 1100
atgtgcata aaagtaagg aagaacaaa actagtccaa accagtctac 1150
actgtggatt tcaaagagta ccagaaaaga aagtggcatg gaagtataat 1200
aactcattga ctggttcca gaattttgta attctggatc tgtataagga 1250

```

Sequence Listing - P3230R1C1.txt

atggcatcag aacaatagct tggaatggct tgaatcaca aaggatctgc 1300
aagatgaact gtaagctccc ccttgaggca aatattaaag taattttat 1350
atgtctatta ttccatttaa agaatatgct gtgctaataa tggagtgaga 1400
catgcttatt ttgctaagg atgcacccaa acttcaaact tcaagcaaa 1450
gaaatggaca atgcagataa agttgttatc aacacgtcgg gagtatgtgt 1500
gttagaagca attcctttta ttctttcac ctttcataag ttgttatcta 1550
gtcaatgtaa tgtatatgtt attgaaattt acagtgtgca aaagtatttt 1600
acctttgcat aagtgtttga taaaaatgaa ctgttctaatt attatttttt 1650
atggcatctc atttttcaat acatgctctt ttgattaaag aaacttatta 1700
ctgtgtgcaa ctgaattcac acacacacaa atatagtacc atagaaaaag 1750
tttgttttct cgaaataatt catctttcag ctctctgct tttggtcaat 1800
gtctaggaaa tctctcaga aataagaagc tatttcatta agtgtgatat 1850
aaacctcttc aaacatttta cttagaggca aggattgtct aatttcaatt 1900
gtgcaagaca tgtgccttat aattattttt agcttaaaaa taaacagatt 1950
ttgtaataat gtaactttgt taatagggtgc ataacacta atgcagtcac 2000
tttgaacaaa agaagtgaca tacacaatat aaatcatatg tcttcacacg 2050
ttgcctatat aatgagaagc agctctctga ggggtctgaa atcaatgtgg 2100
tcctctctt gccactaaa caaagatggg tgttcggggg ttgggattga 2150
cactggaggc agatagtgtc aaagttagtc taaggtttcc ctagtgttat 2200
ttagcctctg actatattag tatacaaga ggtcatgtgg ttgagaccag 2250
gtgaatagtc actatcagtg tggagacaag cacagcacac agacatttta 2300
ggaaggaaaag gaactacgaa atcgtgtgaa aatgggttgg aacccatcag 2350
tgatgcataa ttcatgtatg aggggttgtg tgagatagaa aatgggtggc 2400
cctttctgtc ttatctcta gtttctcaa tgcttacgcc ttgttcttct 2450
caagagaaaag ttgtaactct ctgggtctca tatgtccctg tgctcctttt 2500
aaccaataaa agagttcttg ttctgggggg aaaaaaaaaa aaaaaaaaaa 2550
aaaaaaaaaa aaaaaaaaaa 2570

<210> 168

Sequence Listing - P3230R1C1.txt

<211> 273

<212> PRT

<213> Homo Sapien

<400> 168

Met Ser Arg Val Val Ser Leu Leu Leu Gly Ala Ala Leu Leu Cys
1 5 10 15

Gly His Gly Ala Phe Cys Arg Arg Val Val Ser Gly Gln Lys Val
20 25 30

Cys Phe Ala Asp Phe Lys His Pro Cys Tyr Lys Met Ala Tyr Phe
35 40 45

His Glu Leu Ser Ser Arg Val Ser Phe Gln Glu Ala Arg Leu Ala
50 55 60

Cys Glu Ser Glu Gly Gly Val Leu Leu Ser Leu Glu Asn Glu Ala
65 70 75

Glu Gln Lys Leu Ile Glu Ser Met Leu Gln Asn Leu Thr Lys Pro
80 85 90

Gly Thr Gly Ile Ser Asp Gly Asp Phe Trp Ile Gly Leu Trp Arg
95 100 105

Asn Gly Asp Gly Gln Thr Ser Gly Ala Cys Pro Asp Leu Tyr Gln
110 115 120

Trp Ser Asp Gly Ser Asn Ser Gln Tyr Arg Asn Trp Tyr Thr Asp
125 130 135

Glu Pro Ser Cys Gly Ser Glu Lys Cys Val Val Met Tyr His Gln
140 145 150

Pro Thr Ala Asn Pro Gly Leu Gly Gly Pro Tyr Leu Tyr Gln Trp
155 160 165

Asn Asp Asp Arg Cys Asn Met Lys His Asn Tyr Ile Cys Lys Tyr
170 175 180

Glu Pro Glu Ile Asn Pro Thr Ala Pro Val Glu Lys Pro Tyr Leu
185 190 195

Thr Asn Gln Pro Gly Asp Thr His Gln Asn Val Val Val Thr Glu
200 205 210

Ala Gly Ile Ile Pro Asn Leu Ile Tyr Val Val Ile Pro Thr Ile
215 220 225

Pro Leu Leu Leu Leu Ile Leu Val Ala Phe Gly Thr Cys Cys Phe
230 235 240

Gln Met Leu His Lys Ser Lys Gly Arg Thr Lys Thr Ser Pro Asn
245 250 255

Sequence Listing - P3230R1C1.txt

Gln Ser Thr Leu Trp Ile Ser Lys Ser Thr Arg Lys Glu Ser Gly
 260 265 270

Met Glu Val

<210> 169

<211> 43

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 169

tgtaaaacga cggccagta aatagacctg caattattaa tct 43

<210> 170

<211> 41

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 170

caggaaacag ctatgaccac ctgcacacct gcaaatccat t 41

100

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